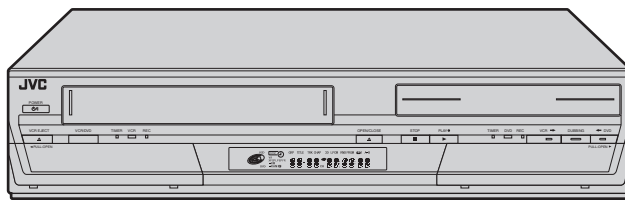


JVC

SERVICE MANUAL

DVD VIDEO RECORDER & VIDEO CASSETTE RECORDER

DR-MV1BEU2, DR-MV1SEK2, DR-MV1SEU2



DR-MV1BEU2, DR-MV1SEK2, DR-MV1SEU2 [D3RV21]



This model is a model to whom the DVD drive unit and some parts are changed based on DR-MV1BEU, DR-MV1SEK, DR-MV1SEU. Please see page 2 about details and the distinction method. Since this service manual has indicated only the "Parts List", please refer to another manual (DR-MV1BEU, DR-MV1SEK, DR-MV1SEU ISSUE No.YD014 2004/6) about other items.

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About this service manual

This model is a model to whom the DVD drive unit and some parts are changed based on DR-MV1BEU, DR-MV1SEK, DR-MV1SEU.

Since the way of recognizing is explained below, in the case of DR-MV1BEU2, DR-MV1SEK2, DR-MV1SEU2, please use this manual.

In the case of DR-MV1BEU, DR-MV1SEK, DR-MV1SEU, please refer to another service manual (No.YD014 2004/6).

HOW TO IDENTIFY MODELS

How to recognize from the appearance of the model concerned is written below.

Please distinguish from several contents currently printed on the rating label of the rear panel.

BLANK : DR-MV1BEU, DR-MV1SEK, DR-MV1SEU

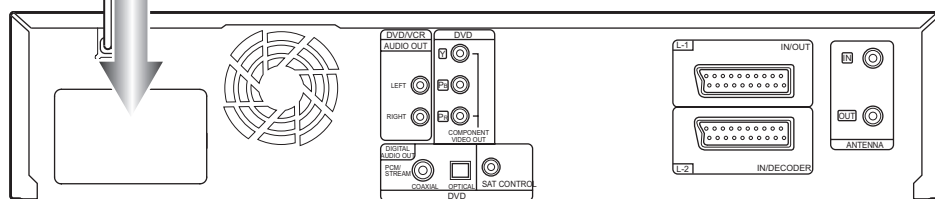
2 : DR-MV1BEU2, DR-MV1SEK2, DR-MV1SEU2

MODEL NO. [] [] [] []
AC
S. NO. [] [] [] [] [] []

VICTOR COMPANY OF JAPAN, LTD.
MADE IN [] [] [] []



The surface of
a rear panel



SECTION 1 PRECAUTION

Please refer to "DR-MV1BEU, DR-MV1SEK, DR-MV1SEU (issue number : YD014)" about this section.

SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

Please refer to "DR-MV1BEU, DR-MV1SEK, DR-MV1SEU (issue number : YD014)" about this section.

SECTION 3 DISASSEMBLY

Please refer to "DR-MV1BEU, DR-MV1SEK, DR-MV1SEU (issue number : YD014)" about this section.

SECTION 4 ADJUSTMENT

Please refer to "DR-MV1BEU, DR-MV1SEK, DR-MV1SEU (issue number : YD014)" about this section.

SECTION 5 TROUBLESHOOTING

Please refer to "DR-MV1BEU, DR-MV1SEK, DR-MV1SEU (issue number : YD014)" about this section.



Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY DIGITAL VIDEO STORAGE CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

(No.YD014B)



Printed in Japan
VPT

JVC

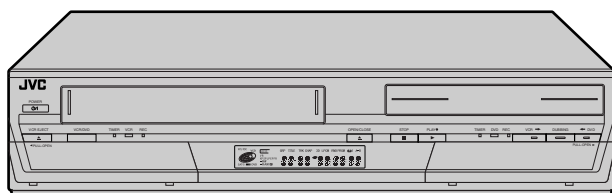


DVD VIDEO RECORDER & VIDEO CASSETTE RECORDER

DR-MV1S/ DR-MV1B

FIRST

See
AUTO SET UP
on PAGE 17



INSTRUCTIONS

EN

LPT0937-001A

Safety Precautions

The rating plate and the safety caution are on the rear of the unit.

WARNING: DANGEROUS VOLTAGE INSIDE

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTION:

A UNIT IS A CLASS 1 LASER PRODUCT. HOWEVER THIS UNIT USES A VISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE THE UNIT CORRECTLY AS INSTRUCTED.

WHEN THIS UNIT IS PLUGGED INTO THE WALL OUTLET, DO NOT PLACE YOUR EYES CLOSE TO THE OPENING OF THE DISC TRAY AND OTHER OPENINGS TO LOOK INTO THE INSIDE OF THIS UNIT.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

CLASS 1 LASER PRODUCT

REPRODUCTION OF LABELS

WARNING LABEL INSIDE OF THE UNIT

CAUTION	VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
ADVARSEL	SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING SE IKKE IND I STRÅLEN - HELLER IKKE MED OPTISKE INSTRUMENTER.
ADVARSEL	SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNDGÅ EKSPONERING FOR STRÅLEN STIR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.
VARO!	AVATTAESSA OLET ALTTIINA NÄKYVÄÄ JA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LAPI.
VARNING	SYNLIG OCH OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD. STRÅLEN ÄR FARLIG STIRRA EJ IN I STRÅLEN OCH BETRÄKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.

IMPORTANT:

- Please read the various precautions on pages 2 and 3 before installing or operating the unit.
- It should be noted that it may be unlawful to re-record pre-recorded tapes, DVDs, or discs without the consent of the owner of copyright in the sound or video recording, broadcast or cable programme and in any literary, dramatic, musical, or artistic work embodied therein.

CAUTION:

- When you are not using the unit for a long period of time, it is recommended that you disconnect the power cord from the mains outlet.
- Dangerous voltage inside. Refer internal servicing to qualified service personnel. To prevent electric shock or fire hazard, remove the power cord from the mains outlet prior to connecting or disconnecting any signal lead or aerial.



- Manufactured under licence from Dolby Laboratories. "Dolby" and double-D symbol are trademarks of Dolby Laboratories.
- "DTS" and "DTS Digital Out" are trademarks of Digital Theater Systems, Inc.
- Cassettes marked "VHS" (or "S-VHS") can be used with this unit. However, S-VHS recording is not possible with this model.
- This model is equipped with SQPB (S-VHS QUASI PLAYBACK) that makes it possible to play back S-VHS recordings in the SP mode with regular VHS resolution.
- HQ VHS is compatible with existing VHS equipment.
- SHOWVIEW is a trademark of Gemstar Development Corporation. The SHOWVIEW system is manufactured under licence from Gemstar Development Corporation.
- This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorised by Macrovision Corporation, and is intended for home and other limited viewing users only unless otherwise authorised by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

For Italy:

"It is declared that this product, brand JVC, conforms to the Ministry Decree n. 548 of 28 Aug.'95 published in the Official Gazette of the Italian Republic n. 301 of 28 Dec.'95"

The STANDBY/ON ϕ /I button does not completely shut off mains power from the unit, but switches operating current on and off. " ϕ " shows electrical power standby and "I" shows ON.

When the equipment is installed in a cabinet or a shelf, make sure that it has sufficient space on all sides to allow for ventilation (10 cm or more on both sides, on top and at the rear).

When discarding batteries, environmental problems must be considered and the local rules or laws governing the disposal of these batteries must be followed strictly.

Failure to heed the following precautions may result in damage to the unit, remote control or disc.

1. **DO NOT place the unit —**
 - in an environment prone to extreme temperatures or humidity.
 - in direct sunlight.
 - in a dusty environment.
 - in an environment where strong magnetic fields are generated.
 - on a surface that is unstable or subject to vibration.
2. **DO NOT block the unit's ventilation openings or holes.**
(If the ventilation openings or holes are blocked by a newspaper or cloth, etc., the heat may not be able to get out.)
3. **DO NOT place heavy objects on the unit or remote control.**
4. **DO NOT place anything which might spill on top of the unit or remote control.**
(If water or liquid is allowed to enter this equipment, fire or electric shock may be caused.)
5. **DO NOT expose the apparatus to dripping or splashing.**
6. **DO NOT use this equipment in a bathroom or places with water. Also DO NOT** place any containers filled with water or liquids (such as cosmetics or medicines, flower vases, potted plants, cups, etc.) on top of this unit.
7. **DO NOT place any naked flame sources, such as lighted candles, on the apparatus.**
8. **AVOID violent shocks to the unit during transport.**

MOISTURE CONDENSATION

Moisture in the air will condense on the unit when you move it from a cold place to a warm place, or under extremely humid conditions—just as water droplets form on the surface of a glass filled with cold liquid. In conditions where condensation may occur, disconnect the unit's power plug from the wall and keep it disconnected for a few hours to let the moisture dry, then turn on the unit.

ATTENTION:**To mobile phone users:**

Using a mobile phone in the vicinity of the unit may cause picture vibration on the TV screen or change the screen to a blue back display.

On placing the unit:

Some TVs or other appliances generate strong magnetic fields. Do not place such appliances on top of the unit as it may cause picture disturbance.

Features of this unit

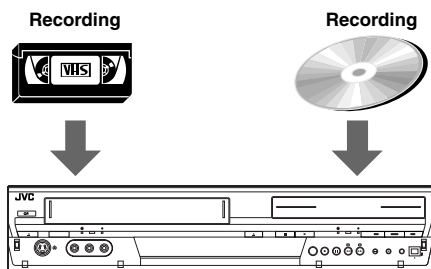
This unit allows you various types of playback and recording because this unit has two tuners.

Record programmes on both DVD deck and VCR deck simultaneously

- 1 Start recording on the DVD deck. (pg. 40)
- 2 Start recording on the VCR deck. (pg. 52)

NOTE:

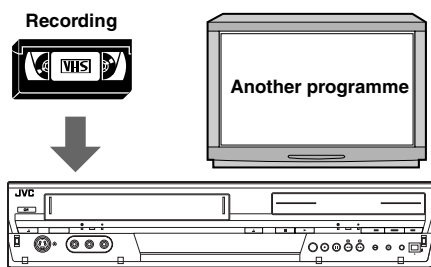
DV IN connector is available for DVD deck only.



Watch another programme while recording on the unit

Pressing **VCR/DVD** switches to the other tuner.

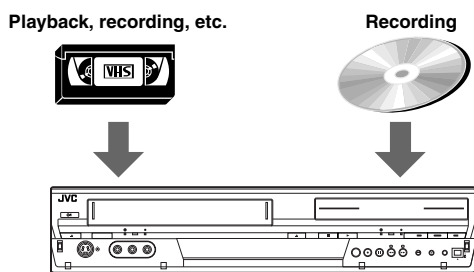
- 1 Start recording on the DVD deck or VCR deck. (pg. 40, 52)
- 2 Press **VCR/DVD**.
- 3 Press **PR +/-** to select the desired channel.



Operate the VCR deck while recording on the DVD deck

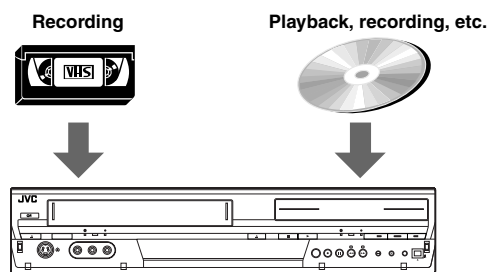
Pressing **VCR/DVD** switch to the other tuner.

- 1 Start recording on the DVD deck. (pg. 40)
- 2 Press **VCR/DVD**.
- 3 Operate the VCR deck.



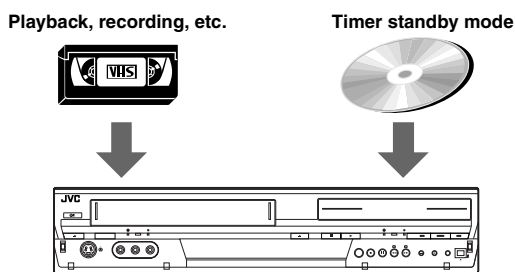
Operate the DVD deck while recording on the VCR deck

- 1 Start recording on the VCR deck. (pg. 52)
- 2 Press **VCR/DVD**.
- 3 Operate the DVD deck.



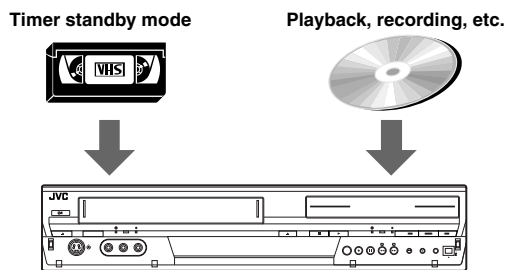
Operate the VCR deck while the DVD deck is in timer standby mode

- 1 Engage the DVD deck's timer mode. (pg. 43)
 - The VCR deck is automatically selected and the VCR lamp lights up on the unit.
- 2 Operate the VCR deck.



Operate the DVD deck while the VCR deck is in timer standby mode

- 1 Engage the VCR deck's timer mode. (pg. 54)
 - The DVD deck is automatically selected and the DVD lamp lights up on the unit.
- 2 Operate the DVD deck.






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About Discs

Recordable/playable Discs

You can use discs with the following logos for recording and playback.

 <p>DVD-RAM 12 cm: 4.7 GB/9.4 GB 8 cm: 1.4 GB/2.8 GB Ver. 2.0 Ver. 2.1</p>	 <p>DVD-RW 12 cm: 4.7 GB/9.4 GB Ver. 1.0 (VR mode) Ver. 1.1 (Video mode/VR mode)</p>
 <p>DVD-R 12 cm: 4.7 GB 8 cm: 1.4 GB General Ver. 2.0 (Video mode)</p>	

- The above table is based on the information as of February 2004.
- Recording and playback may not be performed depending on the characteristics and condition of the disc used, leading to unsatisfactory results. Using discs manufactured by JVC is recommended since they have been tested to be compatible with this unit.

DVD-RAM Discs

It is only possible to use discs which conform with DVD-RAM standard Version 2.0 or 2.1.

- It is impossible to record on DVD-RAM discs which do not conform to this standard. If you use a disc formatted under a different standard version, format it on this unit before use.
- It may not be possible to record, play back, edit or dub a DVD-RAM disc even if it conforms to the standard if it was recorded or edited on the devices from other manufacturers or on a PC, or if it has far too many titles, or if there is very little available capacity remaining on the disc.
- Some DVD-RAM discs are contained in a cartridge. This unit cannot handle this type of disc. Remove the disc from the cartridge (only discs with a removable cartridge); or the use of DVD-RAM discs not contained in a cartridge is recommended.
- DVD-RAM discs recorded on this unit cannot be played back on an incompatible DVD player.
- It is possible to record copy-once programmes of digital broadcasts only onto 4.7/9.4 GB DVD-RAM discs (2.8 GB DVD-RAM discs are not compatible).

DVD-R/RW Discs

It is only possible to use DVD-R discs which conform with DVD-R standard Version 2.0.

When a DVD-R/RW disc (Video mode) is finalised (pg. 87), it can be played back on a standard DVD player as a DVD VIDEO disc.

When a DVD-RW disc (VR mode) is finalised (pg. 87), it can be played back on a standard DVD player compatible with the VR mode of DVD-RW discs.

Before finalising —

— it is possible to record on unrecorded areas of the disc, edit the disc title and programme titles, and delete programmes.

- It is impossible to record or edit DVD-R/RW discs recorded on other devices even if they have not been finalised.
- It is impossible to overwrite recorded areas of DVD-R discs.
- Available recording capacity does not increase even if a recorded programme is deleted from a DVD-R disc.

After finalising —

After a DVD-R/RW disc (Video mode) has been finalised, it is possible to play back the recorded programmes (video and/or audio) on a standard DVD video player as a DVD VIDEO disc.

- Edited titles are displayed as the “DVD menu” in video mode.
- It is impossible to record, edit or delete the data either in video mode or in VR mode.
- Either in video mode or in VR mode, although the disc can be played back on DVD players from other manufacturers, sometimes it may not be possible to play back depending on the disc and recording conditions.
- It is impossible to record on CD-R/RW or DVD-R discs used for authoring.
- It is impossible to record onto DVD-R/RW (Video mode) discs broadcasts that allow you to copy once. The copy once programmes can only be recorded onto DVD-RW discs formatted in VR mode.

















NOTE:

The following may result if you play back a DVD-R disc recorded on another unit.

- The disc does not play.
- A mosaic pattern (block noise) appears on the screen.
- Video or audio may be dropped out.
- The unit stops during playback.

Discs For Playback Only

You can use discs with the following logos for playback only.

 DVD VIDEO (example of region code indications)     	Video CD/Super Video CD  COMPACT disc DIGITAL VIDEO  COMPACT disc SUPER VIDEO  VIDEO CD  VIDEO CD
 COMPACT disc DIGITAL AUDIO Audio CD CD-DA files	 COMPACT disc Recordable CD-R CD-DA/JPEG/ MP3 files
 COMPACT disc ReWritable CD-RW CD-DA/JPEG/ MP3 files	 COMPACT disc CD-ROM JPEG/MP3 files

- Playback may not be performed depending on the characteristics and condition of the disc used.
- DTS Audio CDs can also be played back (An optional DTS decoder is required).
- MP3 and JPEG discs can be played back on this unit only when they have been recorded in the ISO9660 or Joliet format and finalised.
- JPEG files that can be played back on this unit must conform to JFIF/Baseline process, and the maximum resolution of a JPEG file is 3,840 x 2,160 pixels.
- CD-R/RW discs recorded in music CD format need to be finalised to play back on this unit.
- Operation and audio quality of this unit are not guaranteed for discs that do not conform to the Compact Disc specification (CD-DA). Before you play back a CD, check for the CD logo and read the notes on the package to confirm that it conforms to the Compact Disc specification.
- Depending on the intentions of the author of the software, recording conditions of DVD discs and Video CD/SVCD discs may be restricted. Since this unit plays back discs according to the intentions of the author of the software as indicated on the disc, some functions may not operate as commanded.
- When switching from the first layer to the second layer of double-layered DVD VIDEO discs, the image and sound may be momentarily distorted. This is not a malfunction.
- DVD-AUDIO discs compatible with DVD video players can be played.
- Super Audio CDs (SACD) compatible with conventional CD players can be played.

Unplayable Discs

The following types of discs cannot be played using this unit. Do not attempt to play back any kind of disc that is damaged (cracked, warped, or repaired with adhesive tape) or discs in unusual shapes (heart-shaped, octagonal, or other forms). If such discs are accidentally played back, it may cause noise that can lead to speaker damage.

- CD-ROM discs (including PHOTO-CD and CD-G)
- Discs recorded in Packet Write (UDF) format.
- 1.3-GB double density CDs (DDCD)
- High density CDs (HDCD)

The following discs also cannot be played back.

- Discs of a region number other than "2"
- DVD-RAM (2.6 GB/5.2 GB)
- DVD-RAM (TYPE1)









Region Number

The world is divided into 6 regions for DVD VIDEO discs. DVD VIDEO discs are assigned a region number to indicate which region they may be played back in. A disc cannot be played back on this unit unless the region number of the disc matches that of the unit. The region number for this unit is "2". Only discs whose region number includes "2" or "ALL" can be played back such as shown below.

Examples of DVD VIDEO labels which can be played back using this unit.



Marks of discs in this instruction manual

 Allows operation with a DVD-RAM disc.	 Allows operation with a Video CD/Super Video CD (SVCD) disc.
 Allows operation with a DVD-R disc.	 Allows operation with an Audio CD disc.
 Allows operation with a DVD-RW disc.	 Allows operation with a disc including MP3 files.
 Allows operation with a DVD VIDEO disc.	 Allows operation with a disc including JPEG files.

Recording Medium And Format

DVD-RAM

- Recording and erasing can be performed as many times as possible on a disc.
- Editing can be performed after recording, such as deleting unwanted parts.
- While recording, it is possible not only to start playback of a programme currently being recorded, but also to watch another programme previously recorded.

DVD-RW (VR mode)

- Recording and erasing can be performed as many times as possible on a disc.
- Editing can be performed after recording, such as deleting unwanted parts.

DVD-RW (Video mode)

- Can be played back on other DVD players.
- New recording can be performed by erasing all the data on a disc once playback.

DVD-R

- Can be played back on other DVD players.
- Suitable when keeping a recorded disc for a long time.

File Structure Of Discs

DVD VIDEO

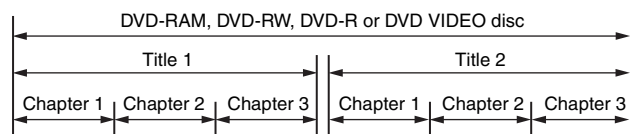
Typically, DVD VIDEO discs are made up of larger units called "titles". Each title has a number (title number) that can be used to select desired titles. Titles are further divided into units called "chapters". Each chapter has a number (chapter number) that can also be used to select desired chapters. Note that some discs are not divided into titles and chapters.

When you record a programme on a DVD-RAM/RW (VR mode) disc

A single recording session results in a single title (a single chapter). However, chapter marks are automatically inserted when recording is paused, or audio changes from monaural or bilingual to stereo due to commercial breaks, etc. It is also possible to insert chapter marks at desired locations during playback. (☞ pg. 27)

When you record a programme on a DVD-R/RW (Video mode) disc

A single recording session results in a single title (a single chapter). However, chapter marks are automatically inserted when recording is paused, or audio changes due to commercial breaks, etc. It is also possible to insert chapter marks at desired locations during either recording or playback. Once the disc has been finalised, these chapter marks are deleted and new chapter marks are assigned automatically approximately every 5 minutes.

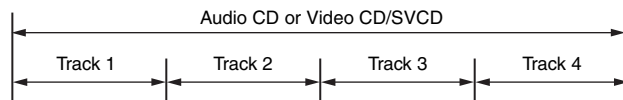


- In Video mode, even before finalising, it is impossible to perform editing operations other than changing the disc name and/or title names and deleting programmes and/or titles.
- After finalising, it is impossible to perform editing operations.

Audio CD/Video CD/SVCD

Typically, Audio CD discs are divided into separate tracks each containing one song. Each track is assigned a number. For example, the third track is Track 3. The same is true for Video CD/SVCD discs.

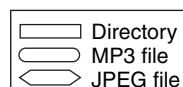
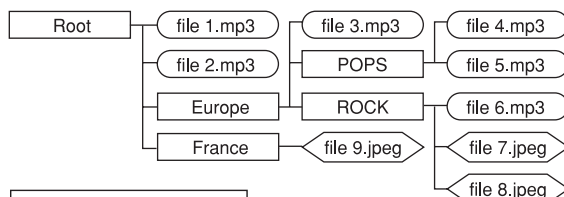
However, some discs are not divided into tracks.



JPEG/MP3 Disc (CD-R/RW/ROM)

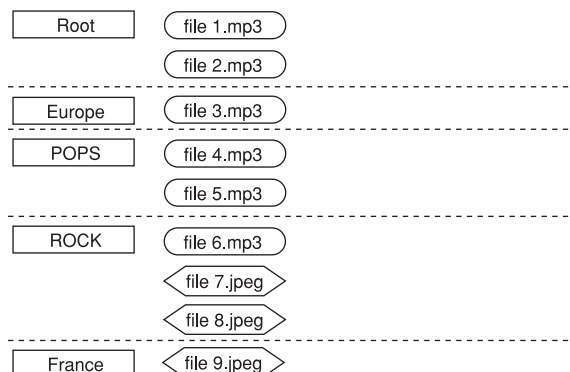
MP3/JPEG files put in directories nested in several levels on a disc will be organized as if they were put in single level directories (groups) by the MP3/JPEG Navigation of this unit. (☞ pg. 64)

File structure of a disc before starting the MP3/JPEG Navigation



File structure of the disc after starting the MP3/JPEG Navigation

Files are automatically grouped as follows and displayed on the MP3/JPEG Navigation screen. Data is displayed in the alphabetical order of file name. Files are grouped based on roots.



- This unit can recognise up to 9 hierarchies including directories and files. Also, it can recognise up to 250 files in each group, and up to 99 groups on a disc.

NOTES:

Video CD/SVCD discs that support Playback Control (PBC)

The contents of a disc are recorded into several hierarchies, and played back according to the instructions on the screen while navigating through the hierarchies. It is also possible to playback recorded tracks consecutively without activating the PBC function even when playing a PBC-compatible disc. (☞ pg. 28)






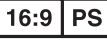
Regarding the contents recorded on discs

Some files may not be played back depending on the file types and other factors.




DVD VIDEO Marks

Sometimes marks are printed on a DVD disc and/or on its packaging to indicate information regarding the contents and functions of the disc. Check the marks indicating the contents and functions of the disc. Note, however, that in some cases a disc may not include a mark even for a function it supports.

Marks related to video

	Number of subtitles		Number of angles
	Recorded under the standard 4:3 aspect ratio		Screen includes black bands at the top and the bottom of image which has a standard 4:3 aspect ratio (letter box)
	Video playback is in Wide video mode (16:9) on wide televisions, but in letter box on televisions with standard 4:3 aspect ratio.		
	Video playback is in Wide video mode (16:9) on wide televisions, but pan and scan is used on televisions with standard 4:3 aspect ratio (either the left or right side of the image is cut-out).		

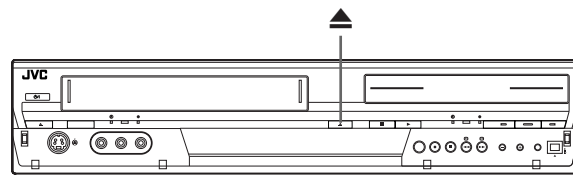
Marks related to audio

	Number of audio tracks
	Dolby Digital mark It has been developed by Dolby Laboratories as a digital surround system.
	DTS (Digital Theater Systems) You can enjoy DTS audio if you connect an amplifier with a built-in DTS decoder to the DIGITAL AUDIO OUT connector of the unit.

Placing A Disc

Opening the disc tray

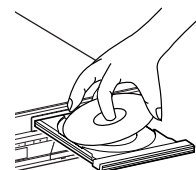
Press  to open the disc tray.



- Pressing the button again closes the disc tray.
- Use the buttons to open and close the disc tray.
- Do not block the disc tray with your hand while it is opening or closing as this may result in hardware failure.
- Do not place unplayable discs or any object other than a disc on the disc tray.
- Do not press down strongly on the disc tray or place any heavy objects on it.

Discs without cartridges

Place the disc on the disc tray with the label side facing up. Since disc size changes depending on the disc to be played back, be sure to correctly align the disc with the grooves for its size. If the disc is not in its groove, it may be scratched or otherwise damaged. To insert an 8 cm disc, place it according to the inner groove.



DVD-RAM discs contained in cartridges

Double-sided discs:

Remove the disc from the cartridge. Align the disc with the grooves on the disc tray as shown in the illustration and insert with the side you wish to play back or record facing down. If you insert the disc with "Side A" facing down, programmes are recorded on the side A.

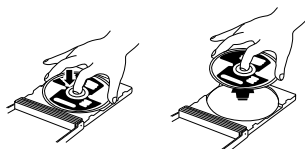
Single-sided discs:

Remove the disc from the cartridge. Align the disc with the grooves on the disc tray as shown in the illustration and insert with the label side facing up.

Care And Handling Of Discs

How to handle discs

When handling a disc, do not touch the surface of the disc. Since discs are made of plastic, they are easily damaged. If a disc gets dirty, dusty, scratched or warped, the images and sound will not be picked up correctly, and such a disc may cause the unit to malfunction.



Label side

Do not damage the label side, stick paper to or use any adhesives on its surface.

Recording side

Make sure that discs are not scratched and dirty on the recording side before use. Scratches and dirt on the recording side of a disc may hinder proper playback and recording. Also be careful that a DVD-RAM disc may get scratched or dirt when removed from cartridge then put back in after use.

Storage

Make sure that discs are kept in their cases. If discs are piled on top of one another without their protective cases, they can be damaged. Do not put discs in a location where they may be exposed to direct sunlight, or in a place where the humidity or temperature is high. Avoid leaving discs in your car!

Maintenance of discs

If there are fingerprints or other dirt adhering to a disc, wipe with a soft dry cloth, moving from the centre outwards.

If a disc is difficult to clean, wipe with a cloth moistened with water. Never use record cleaners, petrol, alcohol or any anti-static agents.

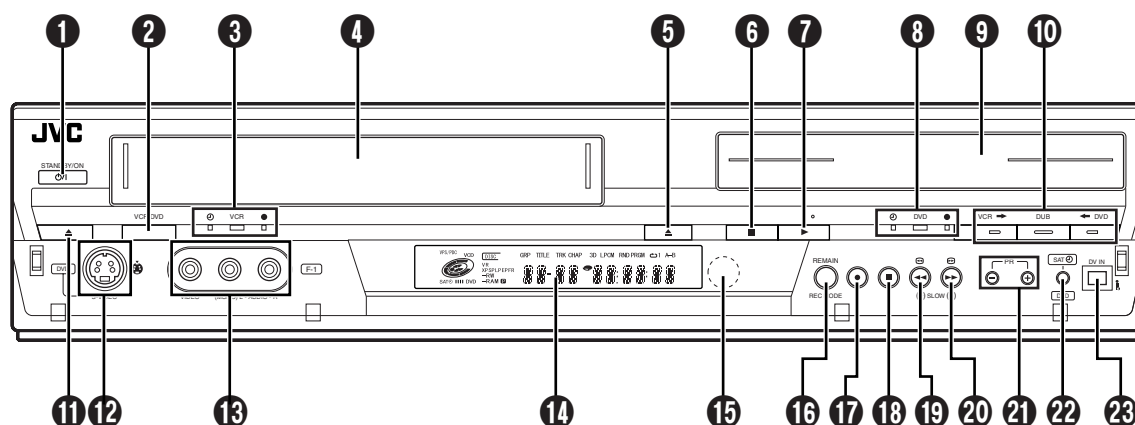


CAUTION:

Sometimes during playback, noise may appear or images may be garbled. This is sometimes due to the disc. (It may not be up to industry standards.)

These symptoms are caused by the discs, not by the malfunction of the unit.

Front View

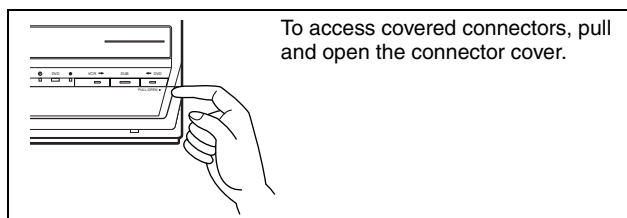


- ❶ Standby/On Button (⏻/⏻)
- ❷ VCR/DVD Button pg. 20
- ❸ VCR Timer Lamp (⌚) pg. 54
VCR Lamp pg. 49
VCR Recording Lamp (●) pg. 52
- ❹ Cassette Loading Slot
- ❺ Open/Close Button (⏏) pg. 9
- ❻ Stop Button (■) pg. 24, 49
- ❼ Play Button (▶) pg. 24, 49
- ❽ DVD Timer Lamp (⌚) pg. 43
DVD Lamp pg. 20, 24
DVD Recording Lamp (●) pg. 40
- ❾ Disc Tray
- ❿ Dubbing Button (DUB) pg. 65
Dubbing Direction Button (VCR→/←DVD) pg. 65, 67
- ⓫ Eject Button (▲) pg. 49
- ⓫ S-Video Input Connectors (S-VIDEO) (DVD deck only) pg. 70
- ⓫ Video/Audio Input Connectors (VIDEO/AUDIO (L/R)) pg. 70

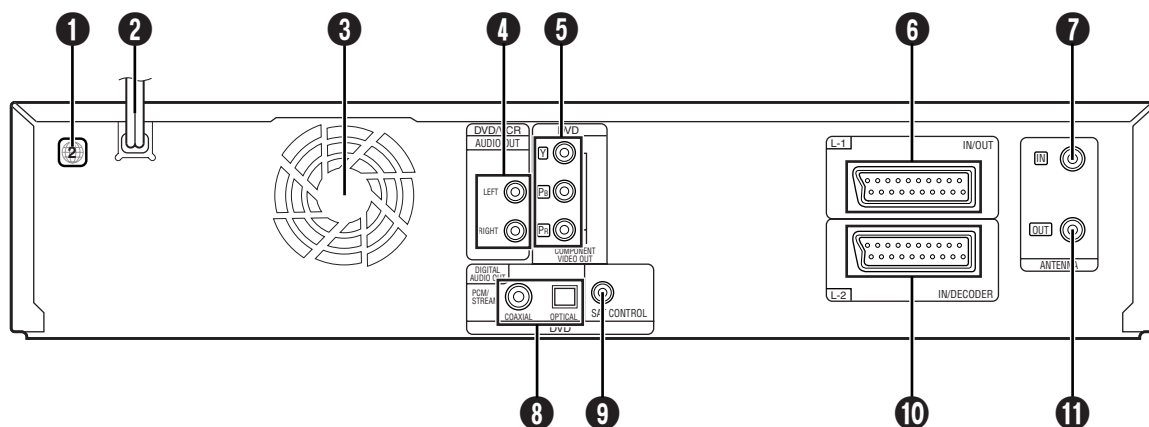
When using a monaural audio cable, use AUDIO L (MONO) input connector. In this case, the sound on the left channel is also recorded on the right channel.

- ⓫ Front Display Panel pg. 13
- ⓫ Infrared Beam Receiving Window
- ⓫ Remain Button (REMAIN) pg. 27, 41
Recording Mode Button (REC MODE) pg. 40, 52
- ⓫ Record Button (●) pg. 40, 52
- ⓫ Pause Button (⏸) pg. 24, 49
- ⓫ Reverse Search Button (◀◀) (DVD deck) pg. 25, 32
Rewind Button (◀◀) (VCR deck) pg. 49, 50
Reverse Slow Button (SLOW -) pg. 26
- ⓫ Forward Search Button (▶▶) (DVD deck) pg. 25, 32
Fast Forward Button (▶▶) (VCR deck) pg. 49, 50
Forward Slow Button (SLOW +) pg. 26
- ⓫ Channel Button (PR +/-) pg. 40, 52
- ⓫ Automatic Satellite Programme Recording Button (SAT ⌚) (DVD deck only) pg. 48
- ⓫ DV Input connector (DV IN (i*)) (DVD deck only) pg. 69

* i (i.Link) refers to the IEEE1394-1995 industry specification and extensions thereof. The i logo is used for products compliant with the i.Link standard.



Rear View



❶ Region Number Label ➤ pg. 7

❷ AC Power Cord ➤ pg. 16

❸ Cooling Fan

- This prevents the temperature from rising inside the unit. Do not remove it.
 - Install the unit so as not to block the area around the fan.
 - The cooling fan on the rear of the unit may be activated even if the unit is turned off in the following cases;
 - In the Automatic Satellite Programme Recording standby mode (➤ pg. 48), slightly before the starting time of VPS/PDC recording (➤ pg. 44)
 - If you connect the decoder or the satellite receiver to the L-2 IN/DECODER connector and if "L-2 SELECT" is set to "DECODER" or "SAT VIDEO" or "SAT S-VIDEO". (➤ pg. 72)
 - "JUST CLOCK" is set to "ON" (➤ pg. 85)
- (Set "JUST CLOCK" to "OFF" if you mind the noise of the fan.)

❹ Audio Output Connectors (AUDIO OUTPUT (LEFT/RIGHT)) ➤ pg. 16, 71

❺ Component Video Output Connectors (COMPONENT VIDEO OUT) (DVD deck only) ➤ pg. 16

❻ L-1 Input/Output Connector (L-1 IN/OUT) ➤ pg. 16, 71, 76, 77

❼ Antenna Input Connector (ANTENNA IN) ➤ pg. 16

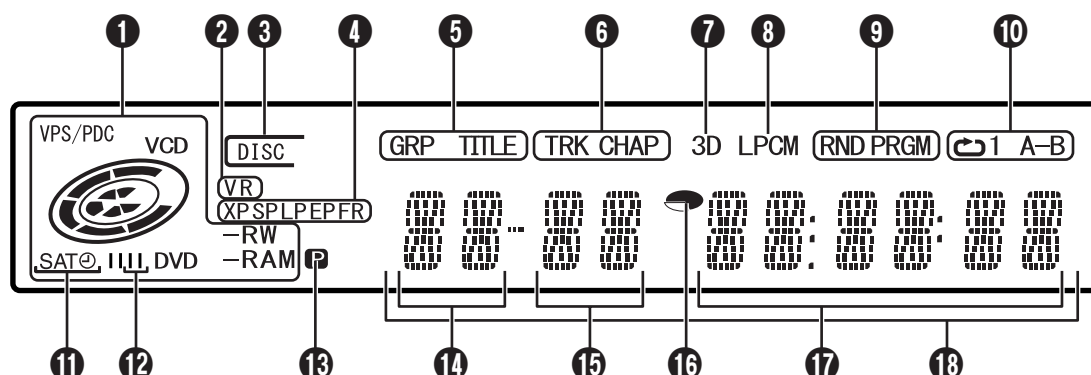
❽ Digital Audio Output Connectors (DIGITAL AUDIO OUT (COAXIAL/OPTICAL)) (DVD deck only) ➤ pg. 73, 77

❾ Satellite Control Connector (SAT CONTROL) ➤ pg. 21

❿ L-2 Input/Decoder Connector (L-2 IN/DECODER) ➤ pg. 21, 71, 76, 77

⓫ Antenna Output Connector (ANTENNA OUT) ➤ pg. 16

Front Display Panel



1 VPS/PDC Indicator pg. 44 – 45

Appears when checking if the station being received transmits a VPS/PDC signal.

Disc Type Indicator

When a disc is loaded, the type of the disc is indicated.

Disc Status Indicator

When a disc is running, the disc marks rotate.

During High-Speed Search: Rotate faster than normal playback.
During Slow Motion: Rotate slower than normal playback.
While recording: Inner red ring lights in the same way as normal playback. During Instant Timer Recording (ITR), inner red ring slowly blinks.

While paused: Disc marks blink when either recording or playing back.

While stopped: Disc marks all light.

While resume stopped: Disc marks all blink.

While the disc tray opened: Disc marks all light out.

No disc on the disc tray: Disc marks all light out.

2 VR Mode Indicator pg. 86

Lights when a DVD-RW disc is formatted in VR mode.

3 DISC Indicator pg. 45

Lights when a disc set up for On-Disc Timer Programming is loaded.

4 Recording Mode Indicator (XP/SP/LP/EP/FR) pg. 40

Blinks when recording mode is being set.

While "FR" is blinking, the left 3 digits of the Multi Display (14 15) indicate setting values ranging from "60" to "480". After the value has been set, only "FR" lights.

5 Group/Title Indicator (GRP/TITLE)

"GRP" or "TITLE" lights depending on a disc loaded while the left 2 digits of the Multi Display (14) indicate the numbers explained below.

"GRP": Total number of groups or group number being played back are displayed on the Multi Display.

"TITLE": Total number of titles or title number being played back are displayed on the Multi Display.

6 Track/Chapter Indicator (TRK/CHAP)

"TRK" or "CHAP" lights depending on a disc loaded while the 3rd and 4th digits from the left of the Multi Display (15) indicate the numbers explained below.

"TRK": Total number of tracks or track number being played back are displayed on the Multi Display.

"CHAP": Chapter number being played back are displayed on the Multi Display.

7 Simulated Surround Effect Indicator (3D) pg. 36

Lights when a simulated surround effect is set to "3D-ON" on the on-screen bar.

8 Linear PCM Indicator (LPCM)

Lights when "XP MODE REC AUDIO" is set to "LINEAR PCM" (pg. 79) for recording with DVD-RAM, DVD-R and DVD-RW discs, and when Linear PCM audio is played.

9 Random/Programme Playback Mode Indicator (RND/PRGM) pg. 38

"RND": Lights when Random Playback mode is set.

"PRGM": Lights when Programme Playback mode is set.

10 Repeat Mode Indicator (1/A-B) pg. 34, 51

Select Repeat Playback mode on the on-screen bar.

"1": Whole disc is played back repeatedly. It also lights up during the Repeat Playback on the VCR deck.

"A-B": A single title/chapter/track is played back repeatedly.

"A-B": The selected part (A-B) is played back repeatedly.

No display: Repeat Playback mode is off.

11 Automatic Satellite Programme Recording Indicator (SAT) pg. 48

Lights up when the DVD deck is in the Automatic Satellite Programme Recording standby mode while the VCR deck is used.

12 VCR Indicator pg. 41, 52

Lights up when the mode is switched to the VCR mode using the TV/VCR button. When switching the mode, "VCR" or "TV" appears for about 2 seconds on the Multi Display (18).

13 Video Output Indicator (P) pg. 88

No display: Indicates that interlace mode is engaged.

"P": Indicates that progressive mode is engaged.

(Example) lights when video output mode is in progressive mode.

14 Group/Title Number Display

15 Track/Chapter Number Display

16 Remaining Time/Elapsed Time Indicator pg. 27, 41

Lights when remaining time of DVD-RAM, DVD-R and DVD-RW discs is displayed, and lights out when elapsed time is displayed. The right 6 digits of the Multi Display (16) indicate elapsed or remaining time of each track.

No display: Indicates elapsed time of the disc.

Displayed: Indicates remaining time of the disc.

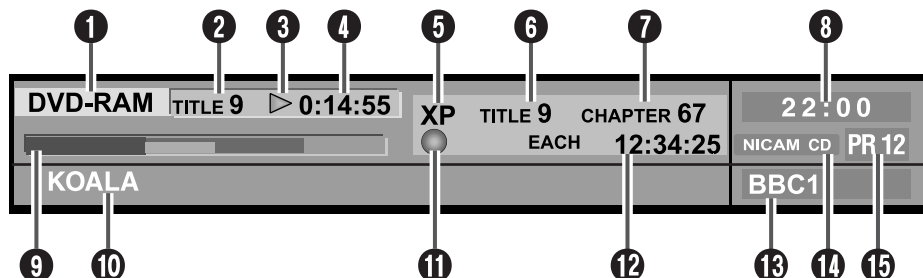
17 Remaining Time/Elapsed Time Display pg. 27, 41

18 Multi Display

Displays clock, received channel, elapsed time, and remaining time. Also displays status of the unit (NO DISC/OPEN/CLOSE/READING).

On-Screen Display (DVD deck)

When "SUPERIMPOSE" is set to "AUTO" and **ON SCREEN** on the remote control is pressed, various operational indicators appear on the TV screen. To clear the operational indicators, press **ON SCREEN** twice.



1 Disc Display

Displays the type of the disc loaded on the disc tray.

2 Title Number*

Displays number of the title currently being played back.

3 Playback Operation Status Indicator*

Indicates playback operation status by pictographs.

4 Playback Time*

Displays playback time of the title currently being played back.

5 Recording Mode

Displays recording mode as XP, SP, LP, EP, FR, FR60-FR360, FR420 and FR480. Current recording mode is displayed during recording, and recording mode in which the programme was recorded is displayed during playback. The recording mode is not displayed during play list playback.

6 Title Number

Displays playback title number during playback, and recording title number during recording.

7 Chapter Number

Displays playback chapter number during playback, and recording chapter number during recording.

8 Clock Display

9 Bar Meter Display pg. 31

Displays playback point and other information in bar meter.

10 Title Name Display

Displays title name newly registered to the title recorded on DVD-RAM/RW/R discs, or file name of JPEG and MP3 files.

11 Operation Status Indicator

Indicates operation status by pictographs. (Also indicates its speed for forward high-speed search, reverse high-speed search and slow motion.)

12 Time Display

Displays single title playback elapsed time, single track playback elapsed time, single track remaining time, total elapsed time, total remaining time, and other information in turn.

13 Station Name Display

Displays currently selected station name.

14 Audio Mode Display


Displays audio that is being input.

15 Channel Position Number/Auxiliary Input Indicator (L-1, L-2, F-1 or SAT**)

Displays currently selected input.

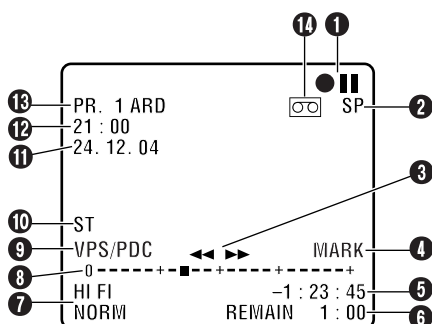
* During Live Memory playback, playback operation status is displayed.

During normal playback, the multichannel encoding method is displayed.

** When "L-2 SELECT" is set to "SAT VIDEO" or "SAT S-VIDEO" ( pg. 72), "SAT" appears instead of "L-2".

On-Screen Display (VCR deck)

When "O.S.D." is set to "AUTO" and **ON SCREEN** on the remote control is pressed, various operational indicators appear on the TV screen. To clear the operational indicators, press **ON SCREEN** again.



1 Operation Mode Indicators

2 Tape Speed (SP/LP)

3 Tape Direction




4 Index Mark Indicator (MARK) pg. 52

5 Counter Display

6 Tape Remaining Time Indicator pg. 53

7 Audio Mode Display pg. 51

8 Tape Position Indicator

The tape position indicator appears on the TV screen when you press  or  from the Stop mode or perform an Index Search. ( pg. 50)
The position of "■" in relation to "0" (beginning) or "+" (end) shows you where you are on the tape.

NOTE:

Depending on the type of tape being used, the tape position indicator may not appear correctly.


9 VPS/PDC Indicator pg. 44, 55

10 Type of Broadcast pg. 53

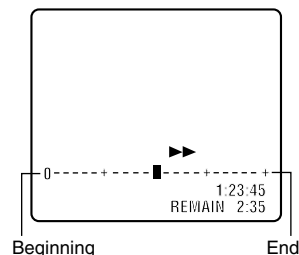
11 Current Day/Month/Year

12 Clock Display

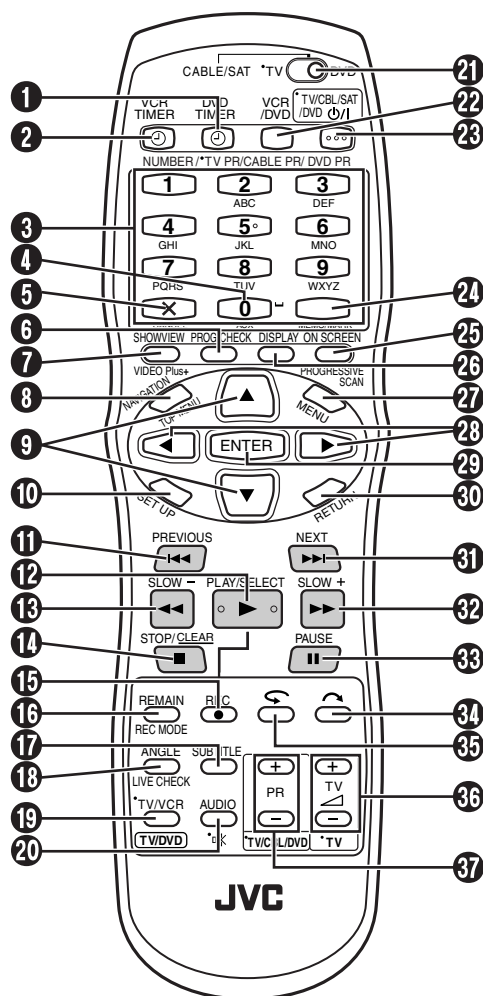
13 Channel Position Number and Station Name/Auxiliary Input Indicator (L-1, L-2, F-1 or SAT*)

* When "L-2 SELECT" is set to "SAT" ( pg. 72), "SAT" appears instead of "L-2".

14 "Cassette Loaded" Mark



Remote Control



The glow-in-the-dark buttons shown in grey on the illustration above are helpful when using the remote control in darkened rooms.

Buttons with a small dot on the left side of the name can also be used to operate your TV. (pg. 74)

- 1 DVD Timer Button (DVD TIMER (Ⓢ)) (DVD deck only) pg. 43
- 2 VCR Timer Button (VCR TIMER (Ⓢ)) (VCR deck only) pg. 54
- 3 Number Keys pg. 21, 40, 52
Character keys (DVD deck only) pg. 59
- 4 Auxiliary Button (AUX)
- 5 Cancel Button (CANCEL (X)) pg. 43
- 6 Programme Check Button (PROG/CHECK) pg. 44, 47, 55, 56
- 7 SHOWVIEW Button pg. 43, 54
- 8 Top Menu Button (TOP MENU) (DVD deck only) pg. 25
Navigation Button (NAVIGATION) (DVD deck only) pg. 57
- 9 $\Delta \nabla$ Button pg. 20
- 10 Set Up Button (SET UP) pg. 20
- 11 Reverse Skip Button (◀◀) (DVD deck) pg. 25, 32
Index Button (◀◀) (VCR deck) pg. 50
Previous Button (PREVIOUS) (DVD deck only) pg. 28

- 12 Play Button (▶) pg. 24, 49
Select Button (SELECT) (DVD deck only) pg. 24, 58
- 13 Reverse Search Button (◀◀) (DVD deck) pg. 25, 32
Rewind Button (◀◀) (VCR deck) pg. 49, 50
Reverse Slow Button (SLOW -) pg. 26
- 14 Stop Button (■) pg. 24, 49
Clear Button (CLEAR) (DVD deck only) pg. 35, 43
- 15 Record Button (●) pg. 40, 52
- 16 Remain Button (REMAIN) pg. 27, 41
Recording Mode Button (REC MODE) pg. 40, 52
- 17 Subtitle Button (SUBTITLE) (DVD deck only) pg. 27
- 18 Angle Button (ANGLE) (DVD deck only) pg. 27
Live Check Button (LIVE CHECK) (DVD deck only) pg. 30, 32
- 19 TV/VCR Button pg. 41, 52
- 20 Audio Button (AUDIO) pg. 28, 51
TV Muting Button (⌂) pg. 74
- 21 TV/CABLE/SAT/DVD switch pg. 20
- 22 VCR/DVD Button pg. 20
- 23 TV/CBL/SAT/DVD Standby/On Button (Ⓢ/Ⓢ)
- 24 Memo Button (MEMO) (DVD deck only) pg. 58, 62, 64
Mark Button (MARK) (DVD deck only) pg. 27
- 25 On-Screen Button (ON SCREEN) (DVD deck only) pg. 14, 33
Progressive Scan Button (PROGRESSIVE SCAN) pg. 88
- 26 Display Button (DISPLAY) pg. 27, 41
- 27 Menu Button (MENU) (DVD deck only) pg. 25
- 28 ◀▶ Button pg. 20
- 29 Enter Button (ENTER) pg. 20
- 30 Return Button (RETURN) pg. 28, 43
- 31 Forward Skip Button (▶▶) (DVD deck) pg. 25, 32
Index Button (▶▶) (VCR deck) pg. 50
Next Button (NEXT) (DVD deck only) pg. 28
- 32 Forward Search Button (▶▶) (DVD deck) pg. 25, 32
Fast Forward Button (▶▶) (VCR deck) pg. 49, 50
Forward Slow Button (SLOW +) pg. 26
- 33 Pause Button (||) pg. 24, 49
- 34 Skip Search Button (↶) pg. 26, 32
- 35 One Touch Replay Button (↶) pg. 32, 50
- 36 TV Volume Button (TV Δ +/-) pg. 74
- 37 TV/CBL/DVD Channel Button (PR +/-) pg. 40, 74

How To Use

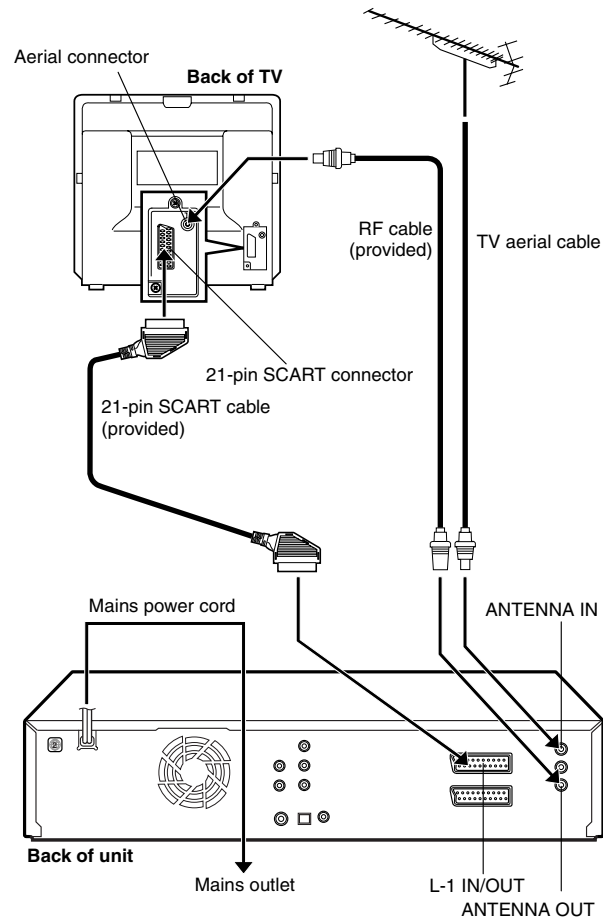
The remote control can operate most of your unit's functions, as well as basic functions of TV sets and satellite receivers of JVC and other brands. (pg. 74, 75)

- Point the remote control toward the receiving window.
- The maximum operating distance of the remote control is about 8 m.

NOTES:

- When inserting the batteries, be sure to insert in the correct directions as indicated under the battery cover.
- If the remote control doesn't work properly, remove its batteries, wait for approximately 5 minutes, replace the batteries and then try operating the unit again.

Basic Connection



It's essential that your unit be properly connected.

ATTENTION:
Your TV must have a 21-pin AV input connector (SCART) for the connection to the unit.

THESE STEPS MUST BE COMPLETED BEFORE ANY VIDEO OPERATION CAN BE PERFORMED.

- 1 Make sure the package contains all of the accessories listed in "SPECIFICATIONS" on page 95.
- 2 Place the unit on a stable, horizontal surface.
- 3 Connect the unit to a TV depending on the TV and cables you use.

Basic Connection

To connect to a TV with AV input connectors —

- 1 Disconnect the TV aerial cable from the TV.
 - 2 Connect the TV aerial cable to the ANTENNA IN connector on the rear panel of the unit.
 - 3 Connect the ANTENNA OUT connector on the rear panel of the unit and the TV's aerial connector with the provided RF cable.
 - 4 Connect the L-1 IN/OUT connector on the rear panel of the unit and the TV's 21-pin SCART connector with a provided 21-pin SCART cable.
- The L-1 IN/OUT connector accepts and delivers either a composite signal (regular video signal), Y/C signal or RGB signal.
 - Set your TV to the VIDEO (or AV), Y/C, or RGB mode according to the type of your TV's SCART connector.
 - Select an appropriate option of "L-1 OUTPUT" as follows (ⓘ pg. 72):

When your TV's SCART connector accepts:	Set "L-1 OUTPUT" to:
Composite video signals	"SCART VIDEO"
Y/C signal (separated luminance (brightness) and chrominance (colour) signals)	"SCART S-VIDEO"
RGB signal	"SCART RGB"

Component Video Connection (DVD deck only)

To connect to TV's component video input connectors

- 1 Perform 1 – 3 in "Basic Connection".
 - 2 Connect the unit's COMPONENT VIDEO OUT connectors to the TV's component video input connectors.
 - 3 Connect the unit's AUDIO OUT connectors to the TV's AUDIO input connectors.
- You can obtain high-quality component video pictures.
 - If your TV is not stereo-capable, use the unit's AUDIO OUT connectors to connect to an audio amplifier for Hi-Fi stereo sound reproduction.
 - By using the component video connection, you can view the images in the progressive mode. For switching to the progressive mode, refer to "Scan Mode Set" (ⓘ pg. 88).

4 Plug the end of the AC power cord into an AC outlet.

- "LOADING" blinks on the front display panel when the AC plug of the power cord is connected into a mains outlet and no operation will be done for approximately 50 seconds. This is not a malfunction.

After connection is completed, perform "Auto Set Up" on page 17.

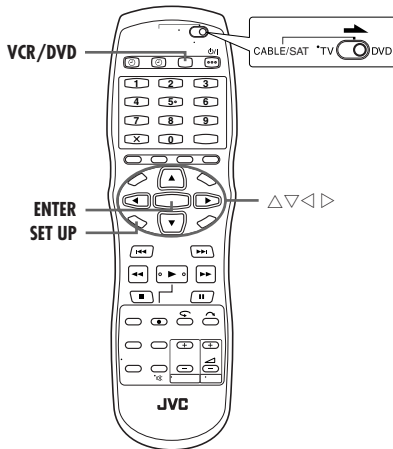
Auto Set Up

Auto Channel Set/Auto Clock Set/Auto Guide Program Number Set

After the ϕ/I button on the unit or remote control is pressed for the first time to turn on the unit, by simply selecting your country*, the Auto Set Up function sets the tuner channels, clock** and Guide Program numbers automatically.

* If you live in Belgium (BELGIUM) or Switzerland (SUISSE), you also need to select your language.

** If you live in Hungary (MAGYARORSZÁG), Czech Republic (ČESKÁ REPUBLIKA), Poland (POLSKA) or other countries in Eastern Europe (OTHER EASTERN), set the clock manually.



Before starting, make sure of the following:

- The TV aerial cable should be connected to the unit.
- The unit's mains power cord should be connected to a mains outlet.
- Turn on the TV and select the AV mode.
- Slide the TV/CABLE/SAT/DVD switch to DVD.

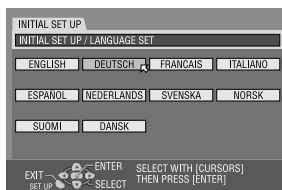
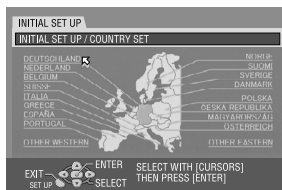
1 Press ϕ/I to turn on the unit. The Country Set display appears on the TV screen.

2 Press $\triangle \nabla \triangleleft \triangleright$ to select your country's name, then press **ENTER**. The Language Set display appears on the TV screen.

NOTES:

- If you have selected BELGIUM or SUISSE, go to step 3.
- If you have selected MAGYARORSZÁG, ČESKÁ REPUBLIKA, POLSKA or OTHER EASTERN, press **ENTER**. The Clock Set screen appears. Set the clock manually (pg. 85), then go to step 4.
- If you have selected any other country name, go to step 4.

3 Press $\triangle \nabla \triangleleft \triangleright$ to select the language of your choice, then press **ENTER**. The AUTO SET/T-V LINK display appears on the TV screen.

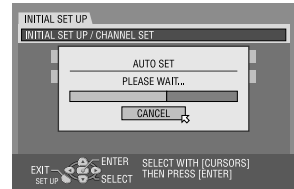
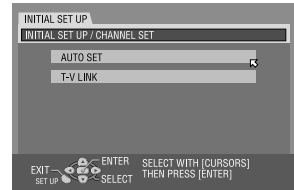


4 Press $\triangle \nabla$ to select "AUTO SET", then press **ENTER**. The AUTO SET screen will appear, and the unit automatically performs Auto Channel Set.

- When Auto Channel Set is completed, "PLEASE WAIT" will be displayed for about 90 seconds, since channel data is exchanged between the DVD deck and the VHS deck. No operation will be done during this time.

ATTENTION:

- When you have connected the unit to a TV offering T-V Link via a fully-wired 21-pin SCART cable (pg. 16) and the TV is turned on, the unit automatically performs the Preset Download (pg. 18) even if you select "AUTO SET" for Auto Set Up function.



ATTENTION:

Once you have performed Auto Set Up, even if the unit's memory backup has expired, all the stored stations and their Guide Program numbers remain in the unit's memory and the unit will not perform Auto Set Up again. The unit only performs Auto Clock Set when the unit is turned on.

If you have moved to a different area, perform each setting as required.

- Tuner setting (pg. 82)
 - Clock setting (pg. 85)
- If a new station starts broadcasting in your area, perform tuner setting. (pg. 82)

NOTES:

- In areas where no TV station transmits a PDC (Programme Delivery Control) signal, the unit can perform neither Auto Clock Set nor Auto Guide Program Number Set.
- If there is a power cut, or if you press ϕ/I or **SET UP** while Auto Set Up is in progress, Auto Set Up will be interrupted; be sure to turn off the unit power once and try again from step 1.
- Auto Clock Set may not function properly depending on the reception condition.
- If no sound accompanies the picture or the audio sounds unnatural on some channels that have been stored by Auto Set Up, the TV system setting for those channels may be incorrect. Select the appropriate TV system for those channels. (pg. 84, "INFORMATION")

After "Auto Set Up" is completed, perform "Monitor Set (DVD Deck Only)" on page 23.

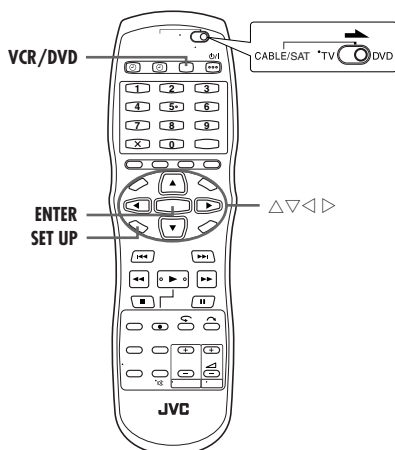
Preset Download

Auto Channel Set by Downloading from TV/Auto Clock Set/Auto Guide Program Number Set

ATTENTION:

You can use this function only with a TV offering T-V Link, etc.* Be sure to use a fully-wired 21-pin SCART cable.

* Compatible with TVs offering T-V Link, EasyLink, Megalogic, SMARTLINK, Q-Link or DATA LOGIC via a fully-wired 21-pin SCART cable. The degree of compatibility and available functions may differ by system.



If you have connected the unit to your TV via a 21-pin SCART cable (pg. 16), the unit will automatically perform Preset Download instead of the Auto Set Up in step 4 on page 17. After downloading, the unit sets the clock and Guide Program numbers automatically.

- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.
- Perform steps 1 to 3 of "Auto Set Up" (pg. 17) before continuing.

1 Press $\Delta \nabla$ to select "T-V LINK" and press **ENTER**. The T-V LINK screen will appear, and the unit automatically performs Auto Channel Set.

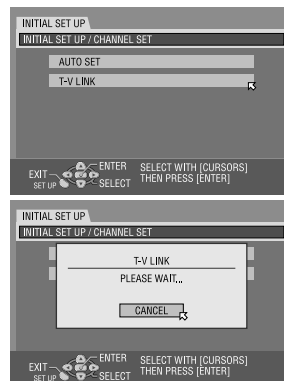
- When Auto Channel Set is completed, "PLEASE WAIT" will be displayed for about 90 seconds, since channel data is exchanged between the DVD deck and the VHS deck. No operation will be done during this time.

ATTENTION:

Preset positions on the front display panel increase from "PR 1"; do NOT press any button on the unit or remote control until the front display panel shows clock time, "PR 1" or "— :— :—" as illustrated on page 19.

NOTES:

- For details, refer to the instruction manual of your TV.
- In the area where no TV station transmits a PDC (Programme Delivery Control) signal, the unit can perform neither Auto Clock Set nor Auto Guide Program Number Set.
- If there is a power cut, or if you press O/I or **SET UP** while downloading or set up is in progress, it will be interrupted; be sure to turn off the unit power once and try again from the beginning.
- Auto Clock Set may not function properly depending on the reception condition.
- On this unit, the characters available for station names (ID) are A–Z, 0–9, —, *, + and _ (space). Some names of downloaded stations may differ from those of your TV. (pg. 84)



After "Preset Download" is completed, perform "Monitor Set (DVD Deck Only)" on page 23.

Results Of Auto Set Up/Preset Download Appearing On The Front Display Panel

If both Auto Channel Set and Auto Clock Set have been performed successfully, the correct current time is displayed.

A PR 1 20:00

Turn on the TV and select its AV mode, then make sure that all necessary stations have been stored in the unit's memory by using the **PR +/-** button(s).

- If station names (ID – pg. 99) have also been stored in the unit's memory, the station name will be displayed at the top right corner of the TV screen for about 5 seconds when the unit is tuned to a different station.
- If you want to set the tuner manually such as to add or skip channels, to change channel positions, or to set or change station names, see pages 83 – 84.

If Auto Channel Set has succeeded but Auto Clock Set has not, "PR 1" (channel position) is displayed.

B PR 1 - - - -

OR

If both Auto Channel Set and Auto Clock Set have failed, "- - - -" is displayed.

1 Turn on the TV and select its AV mode, then make sure that all necessary stations have been stored in the unit's memory by using the **PR +/-** button(s).

- If station names (ID – pg. 99) have also been stored in the unit's memory, the station name will be displayed at the top right corner of the TV screen for about 5 seconds when the unit is tuned to a different station.
- If you want to set the tuner manually such as to add or skip channels, to change channel positions, or to set or change station names, see pages 83 – 84.

2 Perform "Clock Set" on page 85.

ATTENTION:

After making sure the cables are connected properly, turn off the unit's power once, then turn the unit's power back on again. The Country Set display appears on the TV screen; perform "Auto Set Up" on page 17 or "Preset Download" on page 18 again.

IMPORTANT:

- To check if the Guide Program numbers have been set correctly, perform the SHOWVIEW Timer Programming. (pg. 43, 54)
- In certain reception conditions, station names may not be stored correctly, and auto Guide Program Number Set may not work properly. If the Guide Program numbers are not set properly when you timer-record a TV programme using the SHOWVIEW system, the unit will record a TV programme of a different station. When programming the timer using the SHOWVIEW system, be sure to check the desired channel is selected correctly. (pg. 43, 54)
- Your unit memorises all detected stations even if reception of some of them is poor. You can delete those stations with an unacceptable picture. (pg. 84, "Delete A Channel")

INFORMATION

Language for the on-screen display

Auto Set Up also selects the language automatically for the on-screen display depending on the Country setting you have made in step 2 on page 17 (unless you have selected BELGIUM or SUISSE), as shown below.

SUOMI	→ SUOMI	ITALIA	→ ITALIANO
PORTUGAL	→ ENGLISH	MAGYARORSZÁG	→ MAGYAR
DEUTSCHLAND	→ DEUTSCH	ESPAÑA	→ CASTELLANO
POLSKA	→ POLSKI	NEDERLAND	→ NEDERLANDS
NORGE	→ NORSK	GREECE	→ ENGLISH
SVERIGE	→ SVENSKA	OTHER WESTERN	→ ENGLISH
DANMARK	→ DANSK	EUROPE	
ÖSTERREICH	→ DEUTSCH	OTHER EASTERN	→ ENGLISH
ČESKÁ REPUBLIKA	→ ČESTINA	EUROPE	

If you want to change the language setting manually, see "On-screen Language Set" on page 20.

Just Clock

Your unit is equipped with the Just Clock function which provides accurate time keeping through automatic adjustments at regular intervals, by reading data from a PDC signal. If you want to take advantage of this function, simply set it to "ON". (pg. 85)

T-V Link Functions (DVD Deck Only)

When you connect the unit to your TV via a fully-wired 21-pin SCART cable (pg. 16), the following functions are available. You can use these functions only with a TV offering T-V Link, etc.* For details, refer to the instruction manual of your TV.

* Compatible with TVs offering T-V Link, EasyLink, Megalogic, SMARTLINK, Q-Link or DATA LOGIC via a fully-wired 21-pin SCART cable. The degree of compatibility and available functions may differ by system.

TV Auto Power On

The TV will turn on and be set to its AV mode automatically whenever you start playback.

For details, refer to the instruction manual of your TV.

Unit Auto Standby

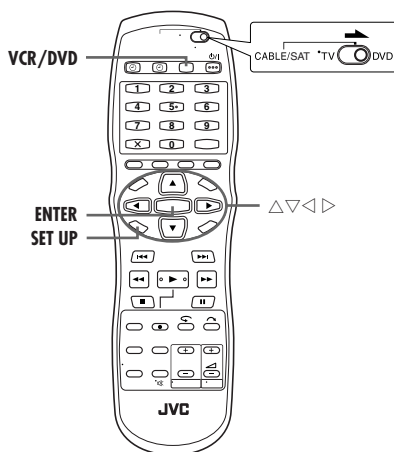
You can use your TV's remote control to turn off the unit. For details, refer to the instruction manual of your TV.

Direct Rec

You can easily start recording the programme that you are watching on your TV. When you use this function, set "DIRECT REC" to "ON". (pg. 79)

Language

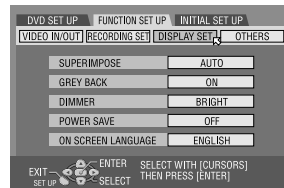
- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



On-screen Language Set

This unit offers you the choice to view on-screen messages in 10 different languages. Though Auto Set Up selects the language automatically (see pg. 19), you can change the language setting manually as required.

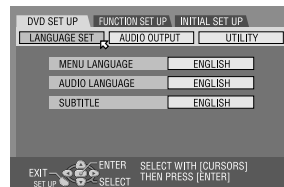
- 1 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.
- 2 Press **SET UP** to access the Main Menu screen.
- 3 Press $\triangleleft \triangleright$ to select "FUNCTION SET UP", then press **ENTER**.
- 4 Press $\triangleleft \triangleright$ to select "DISPLAY SET", then press **ENTER**.
- 5 Press $\triangle \nabla$ to select "ON SCREEN LANGUAGE", then press **ENTER**.
- 6 Press $\triangle \nabla$ to select your desired language, then press **ENTER**.
- 7 Press **SET UP** to complete the setting.



Menu/Audio/Subtitle Language Set (DVD deck only)

Some DVD discs contain the DVD menu display, audio and subtitles in multiple languages. With these discs, you can set the default language as you like.

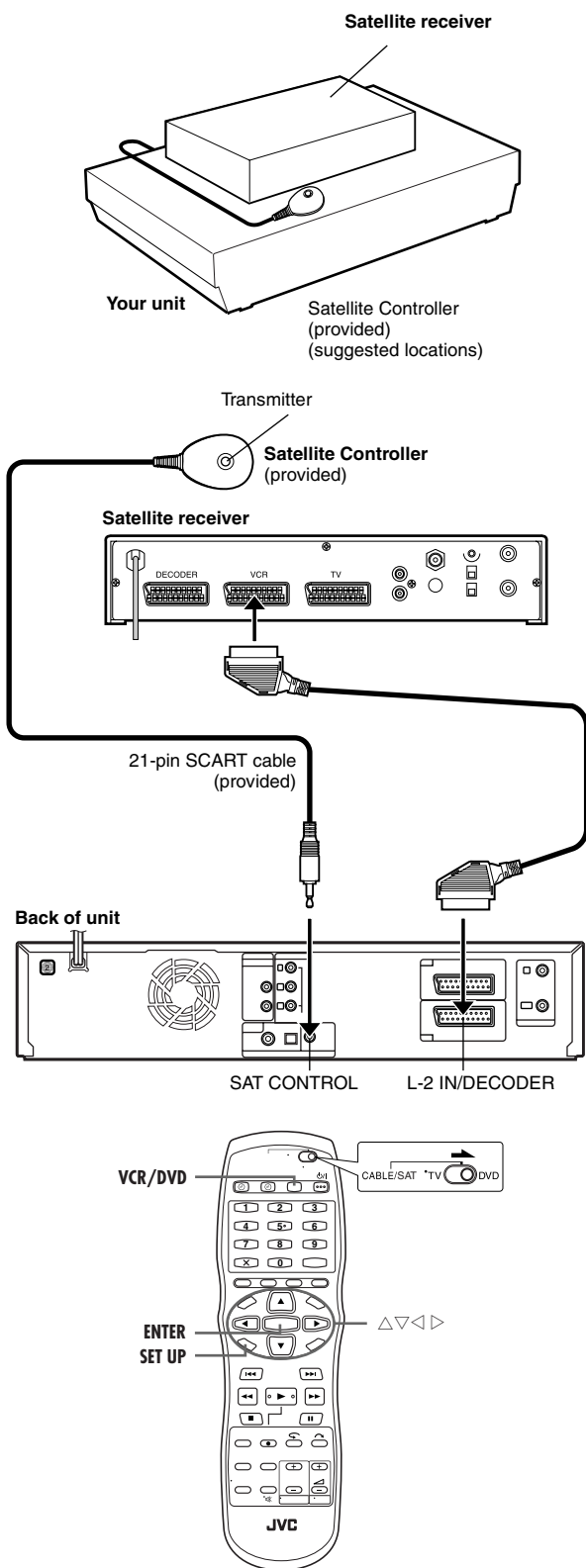
- The procedure shows how to set "MENU LANGUAGE" as an example.
- 1 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.
 - 2 Press **SET UP** to access the Main Menu screen.
 - 3 Press $\triangleleft \triangleright$ to select "DVD SET UP", then press **ENTER**.
 - 4 Press $\triangleleft \triangleright$ to select "LANGUAGE SET", then press **ENTER**.
 - 5 Press $\triangle \nabla$ to select "MENU LANGUAGE", then press **ENTER**.
 - 6 Press $\triangle \nabla$ to select your desired language, then press **ENTER**.
- See "Language Code List" (see pg. 96).
- 7 Press **SET UP** to complete the setting.



NOTE:

When the selected language is not available on the disc, the disc's default menu language is played back.

Satellite Receiver Control Setting (DVD Deck Only)



The following procedure is required if you receive satellite channels through a satellite receiver. Approximately 20 seconds before the SHOWVIEW Timer Programming (pg. 43) or Manual Timer programming (pg. 44) starts, the unit sets its input mode to "L-2" and automatically switches the satellite receiver's channels using a provided Satellite Controller.

Installing Satellite Controller

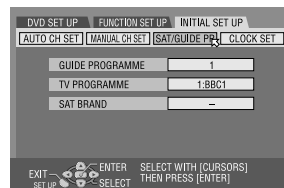
- 1 Place a Satellite Controller so that the path between its transmitter and the satellite receiver's remote sensor is unobstructed.
 - 2 Fix securely using the adhesive strip attached on the back of the Satellite Controller.
 - 3 Be sure to connect the unit's L-2 IN/DECODER connector to the satellite receiver's 21-pin SCART connector.
- NOTE:**
When connecting your satellite receiver, refer to its instruction manual.
- 4 Connect the Satellite Controller to the SAT CONTROL connector on the rear panel.

Setting Satellite Receiver's Brand And Channel

After installation, set the satellite receiver's brand and channel correctly; otherwise, the Satellite Controller cannot work correctly.

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the TV/CABLE/SAT/DVD switch to DVD.

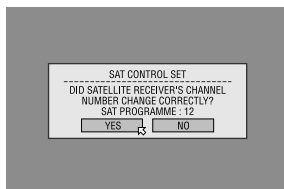
- 1 Turn on the satellite receiver's power.
- 2 Press **SET UP** to access the Main Menu screen.
- 3 Press **< >** to select "INITIAL SET UP", then press **ENTER**.
- 4 Press **< >** to select "SAT/GUIDE PR", then press **ENTER**.
- 5 Press **△ ▽** to select "SAT BRAND", then press **ENTER**.
- 6 Press **△ ▽** to select the brand code from the list on page 22, then press **ENTER**.
 - If the brand code you entered is invalid, the code field will be reset. Enter the correct brand code again.
 - If the unit is in playback or recording mode, you cannot set the brand code.
- 7 Press the appropriate **number keys** to enter one of the channel positions on the satellite receiver, then press **ENTER** twice. The unit enters the Test mode.
 - You can select the channel position between 1 to 999.



8 Check the result of the test.

If the satellite receiver's channel number has been changed to the same one as you set in step 7

Press ◀ ▶ to select "YES", then press **ENTER** to finish the Sat Control Set mode.



If the satellite receiver's channel number has not been changed correctly

Press ◀ ▶ to select "NO", then press **ENTER**. Then perform the procedure again from step 5.

BRAND NAME	CODE
JVC	73
AMSTRAD	60, 61, 62, 63, 92
ASTON	97
CANAL SATELLITE	81
CANAL +	81
D-BOX	85
ECHOSTAR (VIA DIGITAL)	82
FINLUX	68
FORCE	89
GALAXIS	88
GRUNDIG	64, 65, 102
HIRSCHMANN	64, 78, 99
HUMAX	88
ITT NOKIA	68
JERROLD	75
KATHREIN	70, 71, 96
LUXOR	68
MASCOM	93
MASPRO	70
NOKIA	87, 94
PACE	65, 67, 74, 86, 92, 97
PANASONIC	74, 92
PHILIPS	66, 84, 101
RADIX	78
RFT	69
SABA	97
SAGEM	83, 90
SALORA	68
SAMSUNG	83
SIEMENS	64
SKYMASTER	69, 98
TECHNISAT	66, 100
THOMSON	97
TPS	83
TRIAX	91
WISI	64

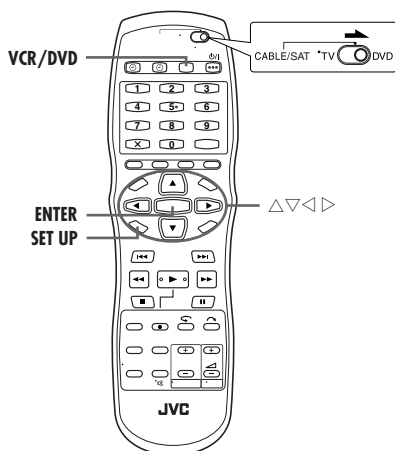
NOTES:

- The Satellite Controller may not work with all types of satellite receiver.
- For some satellite receivers, you need to set its channel input mode to 2-digit.
- If your satellite receiver has more than two channel modes, be sure to set to "All Channel Mode". For details, refer to the instruction manual of the satellite receiver.
- When selecting the satellite receiver's channel (→ step 7), signals from the remote control may interfere with signals transmitted from the Satellite Controller. In this case, move the remote control as close to the unit's infrared beam receiving window as possible.

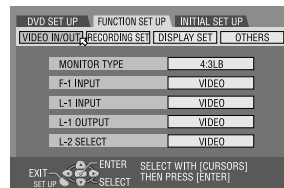
Monitor Set (DVD Deck Only)

You can select the monitor type depending on the TV used when you play back DVD VIDEO discs recorded for wide-screen TVs.

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



- 1 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.
- 2 Press **SET UP** to access the Main Menu screen.
- 3 Press $\triangleleft \triangleright$ to select "FUNCTION SET UP", then press **ENTER**.
- 4 Press $\triangleleft \triangleright$ to select "VIDEO IN/OUT", then press **ENTER**.
- 5 Press $\triangle \nabla$ to select "MONITOR TYPE", then press **ENTER**.
- 6 Press $\triangle \nabla$ to select the desired option, then press **ENTER**.
- 7 Press **SET UP** to complete the setting.



* The **boldface** settings below indicate the settings at your purchase.

■ MONITOR TYPE — **4:3LB** / 4:3PS / 16:9 AUTO / 16:9 FIX

4:3 LB (Letter Box conversion): Select this when the aspect ratio of your TV is 4:3 (conventional TV). While viewing a wide screen picture, the black bars appear on the top and the bottom of the screen.

4:3 PS (Pan&Scan): Select this when the aspect ratio of your TV is 4:3 (conventional TV). While viewing a wide screen picture, the black bars do not appear; however, the left and right edges of the pictures will not be shown on the screen.

16:9 AUTO (Wide television conversion): Select this when the aspect ratio of your TV is 16:9 (wide TV).

16:9 FIX (Wide television conversion): Select this when the aspect ratio of your TV is fixed to 16:9 (wide TV). The unit automatically adjusts the screen width of the output signal correctly when playing back a picture whose aspect ratio is 4:3.

Pan&Scan/Letter Box

In general, DVD VIDEO disc are produced for a wide-screen TV with 16:9 aspect ratio.

Material with this ratio will not fit to a TV with 4:3 aspect ratio.

There are two styles to display the image, "Pan&Scan" (PS) and "Letter Box" (LB).

Pan&Scan

The right and left side of the image are cut off. The image fills the screen.

- The picture will be shown in the "4:3LB" mode depending on the disc even if the "4:3PS" mode is selected.



Letter Box

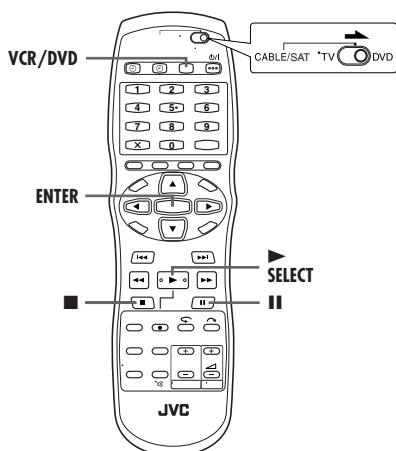
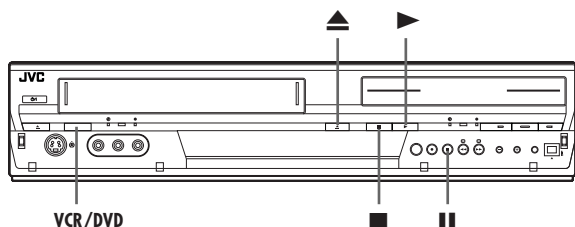
Black bands appear at the top and bottom of the image. The image itself appears in 16:9 aspect ratio.



Basic Playback



- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



ATTENTION:

- It takes approximately 30 seconds to read a disc depending on the type and condition of the disc since this unit is multi-disc compatible (DVD-RAM, DVD-RW, DVD-R). It may even take several minutes when a disc is dirty, scratched or warped.
- It may take a few seconds to start playback. This is not a malfunction.
- Forward/reverse high-speed search and other operations cannot be performed while playback is stopped.

To play back an MP3/JPEG disc, see "Playback With MP3/JPEG Navigation" (pg. 64).

1 Load a disc.

- For details, refer to "Placing A Disc" (pg. 9).

2 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.

3 Press **▶** to start playback.

- If you load a DVD disc whose region code does not match the unit, "REGION CODE ERROR" appears on the TV screen. For details, refer to "Region Number" (pg. 7).
- If "CAN NOT PLAY BACK DISC UNDER CURRENT SETTING" appears on the TV screen, refer to "Parental Lock" (pg. 39).
- With Video CD/SVCD discs with PBC control or some DVD discs, the menu display may appear on the TV screen after starting playback. In this case, select an item which you want to play back from the menu. Otherwise, the playback cannot go forward. Refer to "Playback Control (PBC) Function" (pg. 28) or "Locating A Desired Scene Using The DVD Menu" (pg. 25).
- The Library Database DVD Navi also enables you to search and select the desired programmes. (pg. 58)

4 Press **||** to pause playback.

- To resume normal playback, press **▶**.

5 Press **■** to stop playback.

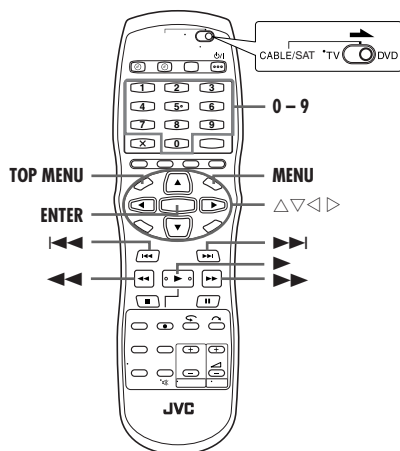
- Playback stops and the unit enters Resume Stop mode and memorises the position where you have stopped playback as a resume point. (pg. 26)
- If **▲** is pressed during playback, playback stops, then the disc tray opens.

NOTE:

When the Library Database DVD Navi screen appears, choose a thumbnail image of the desired programme on the TV screen, then press **SELECT(▶)** or **ENTER**. (pg. 58)

Playback Features

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.
- Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.



Locating A Desired Scene Using The DVD Menu



DVD VIDEO discs may have top menu and disc menu.

Top menu

DVD discs generally have their own menus which show the disc contents. These menus contain various items such as titles of a movie, names of songs, or artist information. You can locate a desired scene by using the top menu displayed on the TV screen. Press **TOP MENU** to access the top menu.

Disc menu

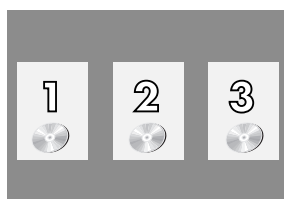
Disc menus include playback data (angle menu, subtitle menu, etc.) specific to each title.

Press **MENU** to access the disc menu.

1 Press **TOP MENU** or **MENU** to access the DVD menu.

2 Press $\Delta \nabla \triangleleft \triangleright$ to select a desired title, then press **ENTER**. Playback starts.

- It may be possible to select the desired item using the **number keys** depending on the menu display.



Example:

NOTE:

When "Q" appears on the TV screen in step 1, the disc does not have a top menu or disc menu.

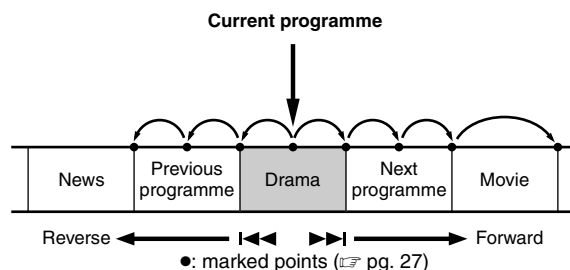
Locating The Start Point Of The Item Or Skip The Item



Press $\triangleleft \triangleleft$ or $\triangleright \triangleright$ during playback.

- Pressing $\triangleright \triangleright$ locates the start point of the item or skips the item for forward direction, then resumes playback.
- Pressing $\triangleleft \triangleleft$ locates the start point of the item or skips the item for reverse direction, then resumes playback.

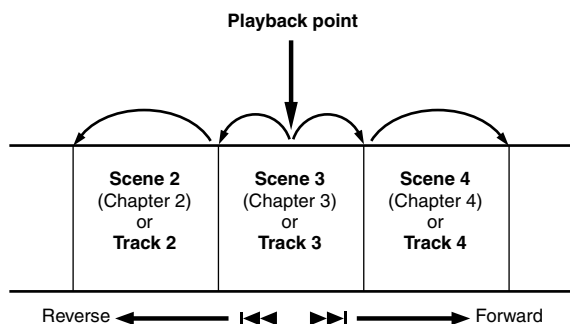
When a DVD-RAM/RW/R disc is played



Example:

To locate the beginning of the next item, press $\triangleright \triangleright$ once.
To locate the beginning of the current item, press $\triangleleft \triangleleft$ once.
To locate the beginning of the previous item, press $\triangleleft \triangleleft$ three times.

When a DVD VIDEO, Audio CD or Video CD/SVCD disc is played



Example:

To locate the beginning of the next item, press $\triangleright \triangleright$ once.
To locate the beginning of the current item, press $\triangleleft \triangleleft$ once.

High-Speed Search



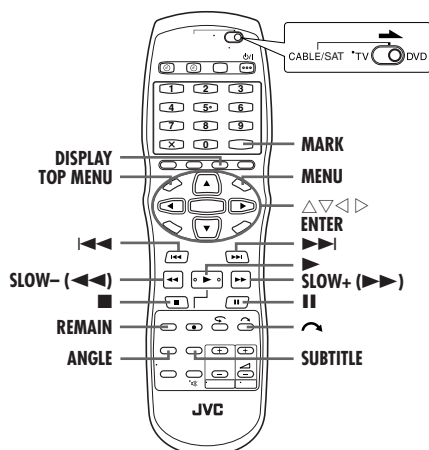
During playback, press $\triangleright \triangleright$ for forward high-speed search, or $\triangleleft \triangleleft$ for reverse high-speed search.

- Each press of the button increases the search speed for each direction.
- To resume normal playback, press \triangleright .

OR

During playback, press and hold $\triangleright \triangleright$ for 2 or more seconds for forward high-speed search, or press and hold $\triangleleft \triangleleft$ for 2 or more seconds for reverse high-speed search.

- Releasing the button resumes normal playback.



Still Picture/Frame-By-Frame Playback



- 1 Press **II** to pause playback.
- 2 Press **II** or **◀▶** to activate frame-by-frame playback.
 - Each press of **II** advances the still picture frame by frame.
 - Each press of **◀▶** advances/reverses the still picture frame by frame.
 - Frame-by-frame playback for reverse direction cannot be performed with Video CD/SVCD discs.
 - To resume normal playback, press **▶**.

Slow Motion



- 1 Press **II** to pause playback.
- 2 Press **SLOW - (◀◀)** or **SLOW + (▶▶)**.
 - Each press of **SLOW - (◀◀)** or **SLOW + (▶▶)** increases the slow motion speed for each direction (from 1/16 to 1/2 times the normal speed).
 - Slow motion for reverse direction cannot be performed with Video CD/SVCD discs.

OR

Press **SLOW - (◀◀)** or **SLOW + (▶▶)** for 2 or more seconds.

Skip Search



During playback, press **⏮**.

- Each press initiates an approximately 30-second period of fast-motion playback. Normal playback resumes automatically.

Resume Function



It is possible to memorise the position where you stop playback and resume playback from that position.

- Be sure to set "RESUME" to "ON" or "DISC RESUME". (pg. 79)
- 1 Press **■** during playback to memorise a resume point.
- The unit enters Resume Stop mode and memorises the position where you have stopped playback as a resume point. (The inside of the disc status indicator on the front display panel blinks while memorising.)
- The unit retains a memory of the resume points of the last 30 discs played back, even though they have been ejected if "RESUME" is set to "DISC RESUME". (pg. 79)
- To clear the resume points:
(The inside of the disc status indicator stops blinking and lights.)

When "RESUME" is set to "ON":

- Press **⏻** to turn off the unit.
 - Press **▲** to take out the disc.
 - Press **■** in stop mode.
 - Press **TOP MENU** to display the top menu, then start playback by selecting an item, etc.
 - Press **MENU** to display the disc menu, then start playback by selecting an item, etc.
- When "RESUME" is set to "DISC RESUME":**
- Set "RESUME" to "OFF". (pg. 79)
 - Press **■** in stop mode.
 - Press **TOP MENU** to display the top menu, then start playback by selecting an item, etc.
 - Press **MENU** to display the disc menu, then start playback by selecting an item, etc.

- 2 Press **▶** in stop mode to resume playback. The unit starts playback from the resume point.

NOTES:

- "DISC RESUME" setting works on DVD VIDEO, VCD, SVCD and already finalised DVD-R/DVD-RW (video mode) discs. For other types of discs, the function under "ON" setting will be applied even if "RESUME" is set to "DISC RESUME". (pg. 79)
- If you stop the playback of a disc for which an resume point has already been memorised, the memory will be updated with the new resume point.
- After the unit has memorised the resume point for 30 discs, remembering a new resume point will cause the unit to delete the oldest memorised point. Stopping playback of a disc for which a resume point is already stored may change the order in which the points are stored. This may potentially change the order in which points are deleted.
- When the unit memorises a resume point for a disc, it also remembers audio language, subtitle and angle settings.
- This function may not work for some Video CD/SVCD.
- When "RESUME" is changed to "ON" or "OFF" (pg. 79), resume points of the discs memorised with "RESUME" set to "DISC RESUME" will be cleared.
- Resume points are memorised for each side of a double-sided disc.

Marking Positions To Play Back Again Later

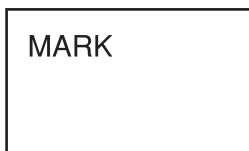


It is possible to mark positions (up to 999 points) where you want to play back once again later, and start playback from a marked position. Marking onto DVD-RAM/RW/R discs when recording is helpful to locate a start point when you play back the discs later.

To mark positions:

During playback, press **MARK** at positions you want to mark.

- “MARK” appears on the TV screen. You can easily locate the marked positions using **I◀◀** or **▶▶I** when you play back the disc.



To delete the marked positions:

While paused, press **I◀◀** or **▶▶I** to locate a marked position you want to delete, then press **MARK**.

- Crossed “MARK” appears on the TV screen, and the marked position is deleted.



NOTE:

When a DVD-R/RW (Video mode) disc is finalised, marked points marked before finalising will be deleted, and programmes will be divided automatically into “chapters” approximately every 5 minutes. (ⓘ pg. 87)

Checking The Time Information



You can check time information of a disc on the front display panel and the TV screen.

Press **DISPLAY** once to display the lastly displayed information. To changes the display, press **DISPLAY** repeatedly.

■ DVD-RAM/DVD-R/DVD-RW

During playback or recording

Clock time (front display panel only) → Current title elapsed time → Disc remaining time* → (back to the beginning)

* only discs before finalising

- Clock time is displayed only when a recordable disc is played back.

In stop mode

- It is possible to check disc remaining time according to recording modes also by pressing **REMAIN**.
- In FR mode, it is possible to set recording time in detail. While the recording mode and the disc remaining time are displayed by pressing **REMAIN**, press **△▽** to select “FR”, then press **◀▶** to select the desired recording time. (ⓘ pg. 42)
- It is not possible to switch the recording mode during playback or while recording.

■ Video CD/SVCD/Audio CD

During playback or in stop mode

Total remaining time → Current track elapsed time → Current track remaining time → Total elapsed time → (back to the beginning)

NOTE:

When a PBC-compatible Video CD/SVCD disc is loaded, deactivate the PBC function. (ⓘ pg. 28)

Angle Selection



You can enjoy a variety of scene angles if a DVD VIDEO disc contains “multi-angle” parts, where the same scene was shot from different angles.

“” appears automatically on the TV screen at the scene where angle is selectable, while it doesn’t appear when “SUPERIMPOSE” is set to “OFF”.

If the disc contains “multi-angle” parts, “” appears on the TV screen at the beginning of the “multi-angle” part.

1 Press **ANGLE** during playback.

The angle selection display appears on the TV screen.



When 3 scene angles are contained.

2 Press **ANGLE** or **◀▶** to select your desired angle.

- Each time you press **ANGLE** or **◀▶**, the angle changes.
- When “” appears on the TV screen, the current scene is not recorded from multiple angles. In addition, some discs prohibit angle selection.
- To clear the angle selection display, press **ENTER**. In addition, the angle selection display disappears automatically if no operation is done for 5 seconds.

Subtitle Selection



Some DVD VIDEO discs contain more than one subtitle language, from among which you can choose the desired subtitle language.

“” appears automatically on the TV screen at the scene where subtitle language is selectable, while it doesn’t appear when “SUPERIMPOSE” is set to “OFF”.

“” appears on the TV screen at the beginning of the part where more than one subtitle language are recorded.

1 Press **SUBTITLE** during

playback. The subtitle selection display appears on the TV screen.



When 3 subtitle languages are contained.

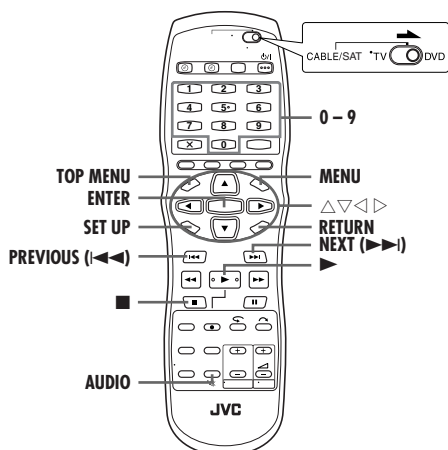
- Each time you press **SUBTITLE**, the subtitle display is switched on and off.

2 Press **◀▶** to select your desired language.

- To clear the subtitle selection display, press **ENTER**.

NOTES:

- When “” appears on the TV screen, no subtitle language is recorded.
- When the subtitle language won’t be changed with the procedure above, change the subtitle on a disc menu displayed by pressing **MENU**.



Audio Language/Sound Selection



Some DVD VIDEO discs contain the multiple audio language or sound. You can select the desired audio language or sound. For some Video CD/SVCD discs, you can switch the audio channel to choose Karaoke either with or without the vocal.

1 Press **AUDIO** during playback.

The Audio Language/Sound selection display appears.

2 Press **AUDIO** or $\triangleleft \triangleright$ to select your desired audio language/sound.

- Each time you press **AUDIO** or $\triangleleft \triangleright$, the audio language/sound changes.
- To clear the Audio Language/Sound selection display, press **ENTER**.

NOTES:

- When "⊙" appears on the TV screen, no audio language is recorded.
- When the audio language won't be changed with the procedure above, change the audio on a disc menu displayed by pressing **MENU**.
- It is only possible to select the audio language in stop mode. The audio language cannot be selected during playback.

Audio Channel Selection



When watching bilingual programmes or playing discs on which you recorded bilingual or stereo programmes, you can choose the desired audio channel.

- When "SUPERIMPOSE" is set to "AUTO", you can confirm on the TV screen the audio channel you have chosen. (pg. 79)
- Each time you press **AUDIO**, the audio channel changes.



TRACK	USE
On-Screen Display	
	For main and sub audio of bilingual programme
	For main audio of bilingual programme
	For sub audio of bilingual programme
	For stereo discs
	For audio of left channel
	For audio of right channel

NOTE:

It is not possible for DVD-R/DVD-RW (Video mode) disc playback to switch the audio channel. The audio channel is played back as set in "AUDIO REC" setting. (pg. 79)

When you can't switch the audio channel of a bilingual programme

When the unit is connected with a digital audio device using an optional optical cable and "DIGITAL AUDIO OUT" is set to "DOLBY DIGITAL/PCM", it is not possible to switch the audio channel of a bilingual programme recorded on a DVD-RAM or DVD-RW (VR mode) disc. (pg. 77) In this case, perform the following steps using the remote control to switch "DIGITAL AUDIO OUT" from "DOLBY DIGITAL/PCM" to "PCM ONLY".

- 1 Press **SET UP** to access the Main Menu screen.
- 2 Press $\triangleleft \triangleright$ to select "DVD SET UP", then press **ENTER**.
- 3 Press $\triangleleft \triangleright$ to select "AUDIO OUTPUT", then press **ENTER**.
- 4 Press $\triangleleft \triangleright$ to select "DIGITAL AUDIO OUT", then press **ENTER**.
- 5 Press $\triangleleft \triangleright$ to select "PCM ONLY", then press **ENTER**. (pg. 78)
- 6 Press **SET UP** to complete the setting.
- 7 Press **AUDIO** to select the desired audio channel.

Playback Control (PBC) Function



Some Video CD/SVCD discs support the PBC function. PBC is an abbreviation of "Play Back Control". A Video CD/SVCD disc recorded with PBC has its own menus, such as a list of the songs on the disc. You can locate a specific scene by using the menu.

1 Press **▶** in stop mode. The PBC menu appears.

2 Press the **number keys** to enter the number of the desired scene. The unit starts playback of the selected item.

- "PBC" appears on the front display panel.
- When "NEXT" or "PREVIOUS" appears on the TV screen: Pressing **NEXT** ($\triangleright \triangleright \triangleright$) advances to the next page. Pressing **PREVIOUS** ($\triangleleft \triangleleft \triangleleft$) returns to the previous page.
- You can return to the menu by pressing **RETURN**.
- The method of the operation is different depending on the disc.

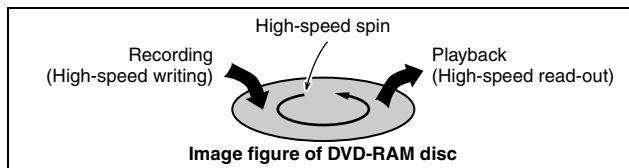
NOTES:

- If you want to playback a PBC-compatible Video CD/SVCD disc without activating the PBC function, start playback in stop mode by using the **number keys**, instead of the **▶** button, to choose the track, then press **ENTER**.
- To activate the PBC function when a PBC-compatible Video CD/SVCD disc is being played back without the PBC function, press **TOP MENU**, or press **■** then press **▶**.

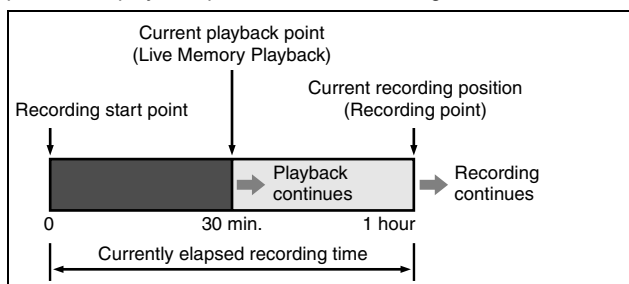
Live Memory Playback



This unit records pictures onto DVD-RAM discs, instead of video tapes, then plays back the pictures recorded on the discs. This makes it possible to achieve high-speed writing and read-out that has not been possible with conventional VCRs, enabling recording and playback simultaneously.

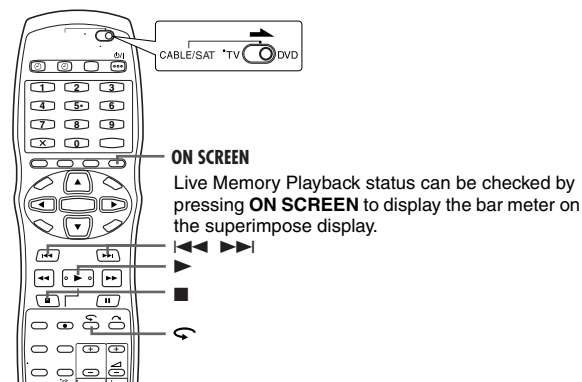


It is called "Live Memory Playback" to start playback of the programme being recorded, with a time-lag between a recording point and a playback point, as shown in the figure below.



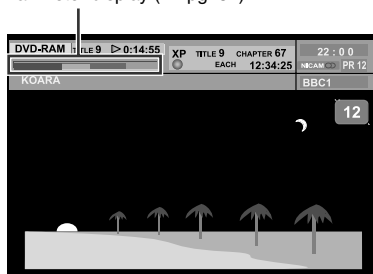
Not only can this unit play back a programme previously recorded while recording or timer recording another programme, but the unit also allows you to play back from the beginning of a programme while continuing to record the same programme.

Recording/playback Status Display



Press **ON SCREEN**. The current status is superimposed on the TV screen.

Bar meter display (pg. 31)



To Play Back From The Beginning Of The Programme While Recording

You can play back a programme you are recording from the beginning while continuing to record or timer record onto a DVD-RAM disc.

Press **▶**. Live Memory Playback starts from the beginning of the programme being recorded.

- Pressing **◀◀** or **▶▶** allows you to locate the desired scenes.

To Move Back The Playback Position Slightly While Recording (One Touch Replay function)

You can move back the playback position while continuing to record or timer record onto a DVD-RAM disc.

Press **↶**.

- Each press skips back for approximately 7 seconds and resumes playback.
- Pressing while paused skips back for approximately 7 seconds and resumes pause.

To Watch A Programme Previously Recorded While Recording

You can play back a programme you recorded previously while recording.

1 Press **▶** during recording. Live Memory Playback starts.

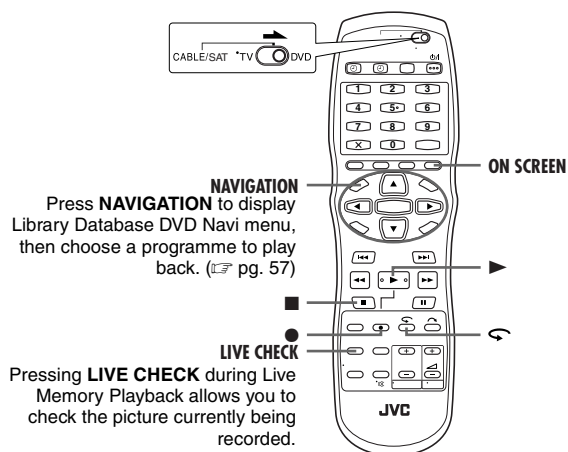
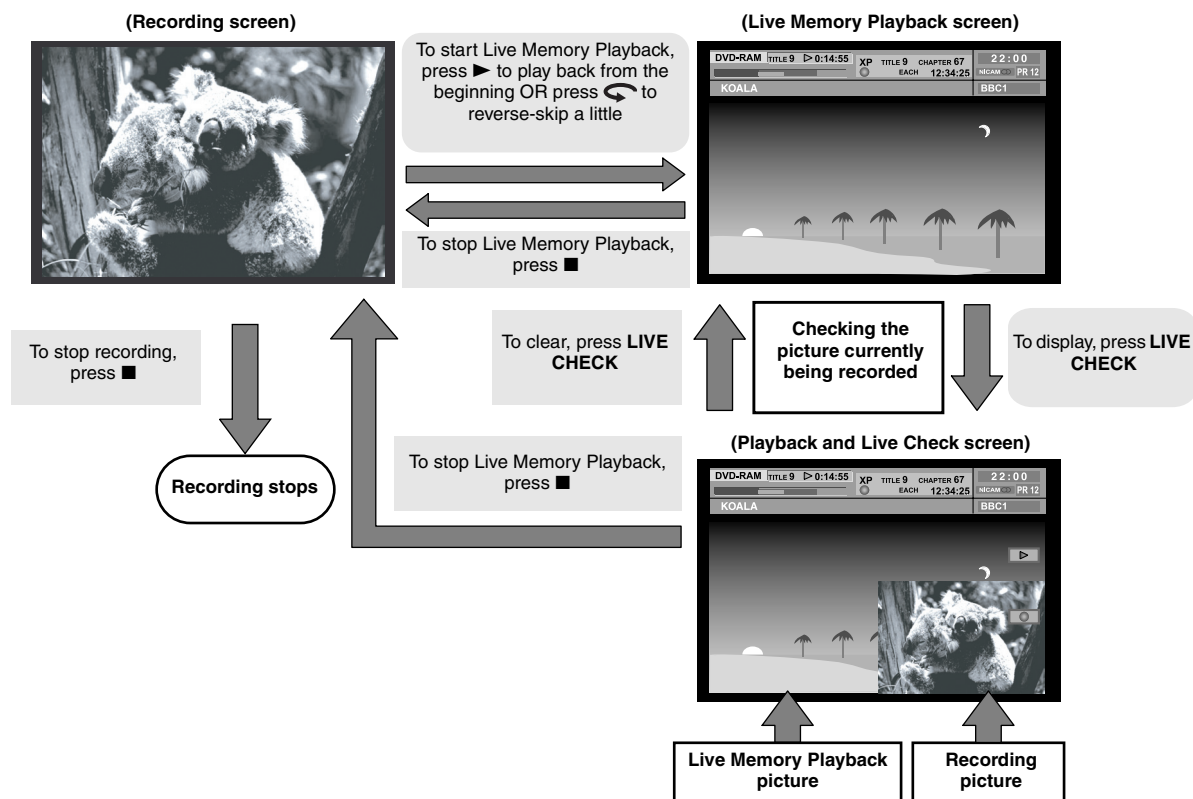
2 Press **◀◀** or **▶▶** to locate the beginning of the desired programme.

NOTE:

To stop playback, press **■**. The programme being recorded is displayed.

Overview Of Live Memory Playback

You can play back a programme you are recording from the beginning while continuing to record or timer record onto a DVD-RAM disc. This is called "Live Memory Playback".



NOTES:

- Live Memory Playback cannot be performed for approximately 30 seconds after recording has started.
- Although high-speed search up to approximately 30 seconds before the current recording point is possible during Live Memory Playback, once the current recording point is reached, the unit resumes normal playback and maintains a delay of approximately 30 seconds so that recording and playback can continue.
- When using Live Memory Playback during timer recording, playback continues even after the end of the recording.
- When using Live Memory Playback during timer recording, playback is automatically stopped just before recording starts, and then recording starts when the time arrives for the next timer-programme.
- It is impossible to perform ITR even if you press ● during Live Memory Playback. (pg. 41)
Press ■ to display the programme being recorded, then perform ITR settings.
- Playback may be paused for a moment during Live Memory Playback, which does not interfere with recording.
- Live Memory Playback cannot be performed while recording the source from DV input.
- When **LIVE CHECK** is pressed to display the picture currently being recorded, the picture size may not be correct.

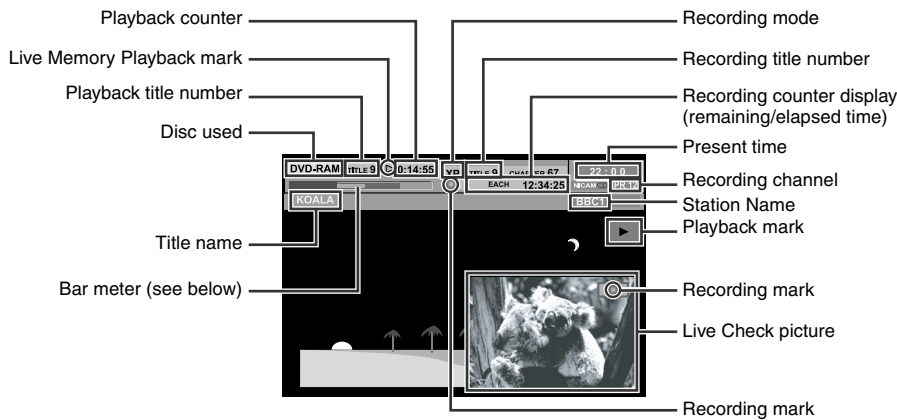
Display During Live Memory Playback

During recording, you can watch at your will what was previously recorded or is currently being recorded. It is possible to perform freely normal playback operations (forward/reverse high-speed search and variable-speed search) within the range of the orange or blue bar on the TV screen.

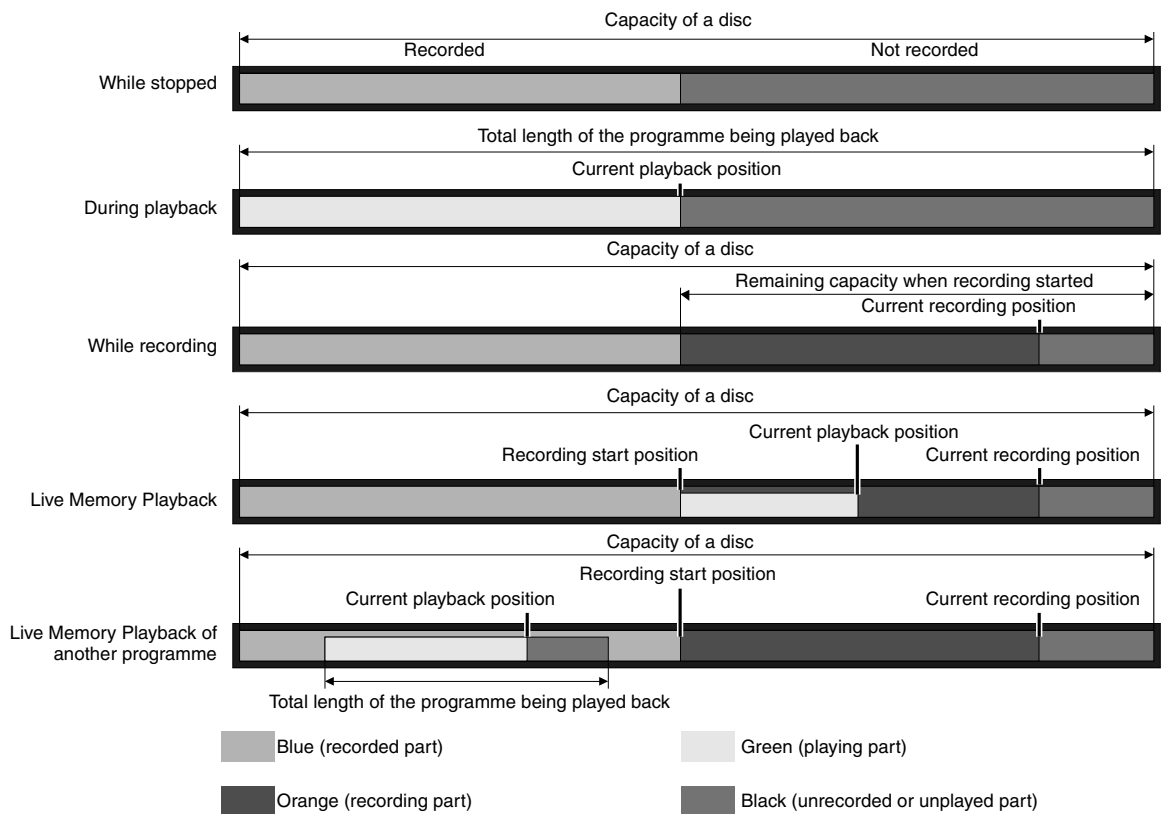
When Live Memory Playback reaches the point of 30 seconds before the current recording point by forward high-speed search or other operations, the unit returns to normal playback.

The superimpose display appears by pressing **ON SCREEN**. (pg. 14)

The Live Check picture is displayed on the bottom right corner by pressing **LIVE CHECK**.

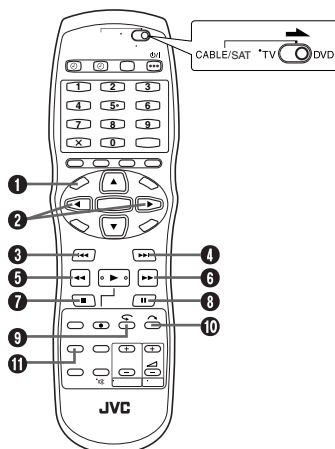


This unit displays the current recording/playback status by the bar meter.
(Example of bar meter display)



Buttons To Be Used During Live Memory Playback

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



1 NAVIGATION

Displays Library Database DVD Navi menu. You can choose a programme to play back.



Available only when paused

Advances/reverses the still picture frame by frame.



- Pressing once skips back to the beginning of the chapter being played back.
- Pressing down for 2 or more seconds during playback reverses playback at 5 times the normal speed while pressed. Releasing the button resumes normal playback.

Available only when paused

- Pressing down for 2 or more seconds reverses playback at 1/16 times the normal speed.



- Pressing once skips forward to the beginning of the next chapter being played back.
- Pressing down for 2 or more seconds during playback advances playback at 5 times the normal speed while pressed. Releasing the button resumes normal playback.

Available only when paused

- Pressing down for 2 or more seconds advances playback at 1/16 times the normal speed.



- Each press of the button during playback advances the playback speed in 5 steps for reverse direction.

Available only when paused

- Pressing once reverses playback by 1/16 times the normal speed.
- Each press of the button during reverse 1/16 times slow-motion reverses slow-motion by 1/16 times, 1/4 times and 1/2 times the normal speed.



- Each press of the button during playback advances the playback speed in 4 steps for forward direction.

Available only when paused

- Pressing once advances playback by 1/16 times the normal speed.
- Each press of the button during forward 1/16 times slow-motion advances slow-motion by 1/16 times, 1/4 times and 1/2 times the normal speed.



Stops Live Memory Playback to return to the screen being recorded.

Then a resume point is stored.

Pressing ■ again stops recording.

8 II

Pressing once pauses playback (still picture playback). Pressing repeatedly advances the still picture frame by frame.



Pressing once skips back for approximately 7 seconds and resumes playback. Pressing repeatedly skips back continuously as many times as pressed.

It is useful when watching sports programmes, etc.



Pressing once skips forward for approximately 30 seconds and resumes playback.

Pressing repeatedly skips forward continuously as many times as pressed.

It is useful when skipping over unwanted sections.

11 LIVE CHECK

Pressing once displays the picture currently being recorded and the one being played back simultaneously.

Pressing successively clears the Live Check window and displays only the picture currently being played back.

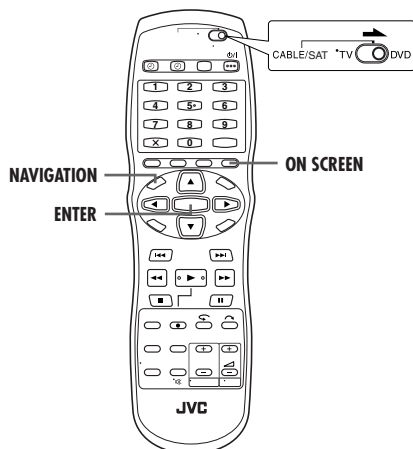
You can check, for example, if the programme you are recording has already finished.

Using The On-screen Bar



The on-screen bar allows you to control various playback functions. Some of the functions operated on Navigation Menu can be controlled on the On-screen bar.

Be sure to clear Library Database DVD Navi screen by pressing **NAVIGATION**.

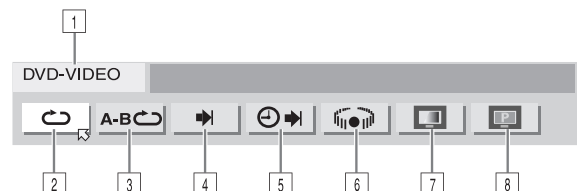


How To Access The On-screen Bar

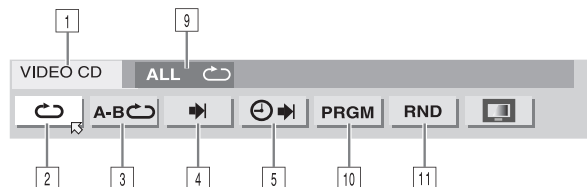
- 1 Press **ON SCREEN** whenever a disc is loaded.

Contents of the on-screen bar during playback

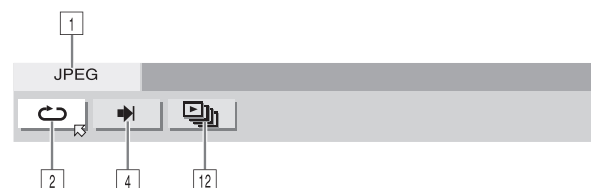
DVD VIDEO



Video CD/SVCD



JPEG disc



- 1 Disc type.
- 2 Select this for Repeat Playback. (pg. 34)
- 3 Select this for A-B Repeat Playback. (pg. 34)
- 4 Select this for search function. (pg. 35)
- 5 Select this for time search function. (pg. 35)
- 6 Select this to switch Simulated Surround Effect function. (pg. 36)
- 7 Select this for Picture Control function. (pg. 36)
- 8 Select this to switch picture source type. (pg. 37)
- 9 Current status area for the selected item.
- 10 Select this for Programme Playback. (pg. 37)
- 11 Select this for Random Playback. (pg. 38)
- 12 Select this to control the switching interval of the slide show. (pg. 38)

NOTE:

Although examples of the on-screen bar are provided here only for 3 types of discs, the on-screen bar will be displayed for whichever disc indicated in the left column.

Basic Operation On The On-screen Bar

Example: When selecting Picture Control function of DVD

During playback or while stopped

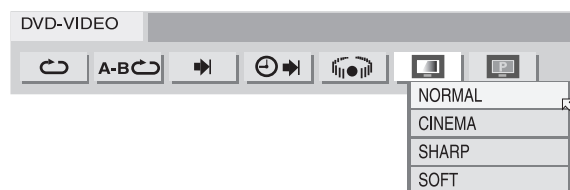
- 1 Press **ON SCREEN** twice to access the on-screen bar. The item currently selected is highlighted and pointed by .



- 2 Press to select "P", then press **ENTER**. The pop-up window appears under the selected item.



- 3 Press to select the desired option, then press **ENTER**.

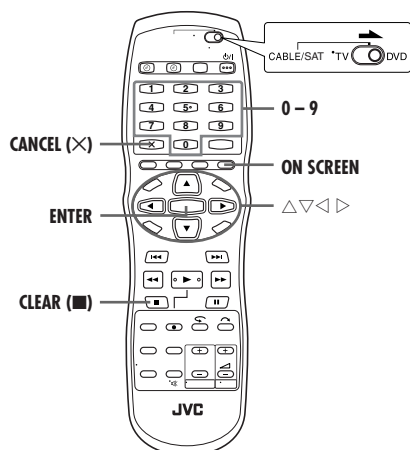


To clear the on-screen bar

Press **ON SCREEN**.

NOTE:

See the corresponding pages for details on each menu item.



Repeat Playback



You can repeat playback as you like according to the type of disc.

- 1 Press **ON SCREEN** twice to access the on-screen bar.
- 2 Press ◀▶ to select "A-B", then press **ENTER**. The pop-up window appears under the selected item.



- 3 Press Δ∇ repeatedly to select the desired Repeat mode, then press **ENTER**.

DVD-RAM/RW/R

OFF: Repeat playback is not performed.

ALL REPEAT: The whole disc is played back repeatedly.

TITLE REPEAT: The current title is played back repeatedly.

DVD VIDEO

OFF: Repeat playback is not performed.

TITLE REPEAT: The current title is played back repeatedly.

CHAPTER REPEAT: The current chapter is played back repeatedly.

Audio CD/Video CD/SVCD/JPEG/MP3

OFF: Repeat playback is not performed.

ALL REPEAT: The whole disc is played back repeatedly.

TRACK REPEAT*: The current track is played back repeatedly.

* "TRACK REPEAT" cannot be selected for JPEG discs.

To clear the on-screen bar

Press **ON SCREEN**.

To cancel Repeat Playback

Repeat the above procedure from step 1, select "OFF" in step 3, then press **ENTER**.

NOTES:

- Repeat Playback is not possible for a Video CD/SVCD with PBC function.
- Repeat Playback may not work properly depending on the type of the disc being used.

A-B Repeat Playback



You can repeat the desired part.

During playback

- 1 Press **ON SCREEN** twice to access the on-screen bar.
- 2 Press ◀▶ to select "A-B".
- 3 Press **ENTER** at the beginning of the desired part you want to repeat (point A). The elapsed playing time of the point A appears.



- 4 Press **ENTER** at the end of the desired part you want to repeat (point B). The elapsed playing time of the point B appears.

- The selected part of the disc (between point A and B) is played repeatedly.



To clear the on-screen bar

Press **ON SCREEN**.

To cancel A-B Repeat Playback

Press ◀▶ to select "A-B", then press **ENTER**.

NOTES:

- A-B Repeat Playback may not work properly depending on the type of disc being used.
- The subtitles recorded around the A-B point may not appear.
- When the end of the item is reached before the end point is set, the on-screen bar disappears from the TV screen. In such a case, repeat the procedure from step 1.
- The point B must be set at least 3 seconds after the point A.
- When playing back a DVD, A-B Repeat Playback is possible only within the same title.
- "A-B" cannot be selected during Programme and Random Playback.
- "A-B" cannot be selected while stopped.

Locating The Beginning Of A Desired Selection



You can locate the beginning of a title, chapter, group or track.

During playback or while stopped

- 1** Press **ON SCREEN** twice to access the on-screen bar.
- 2** Press $\triangleleft \triangleright$ to select " \Rightarrow ", then press **ENTER**.
- 3** Press $\triangle \nabla$ to select the desired item, then press **ENTER**.
 - Skip this step for Video CD/SVCD and Audio CD.

For DVD-RAM/RW/R, DVD VIDEO

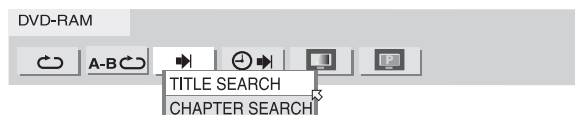
"TITLE SEARCH" or "CHAPTER SEARCH" is selectable. ("TITLE SEARCH" only is selectable while stopped.)

For JPEG, MP3

"GROUP SEARCH" or "TRACK SEARCH" is selectable.

For Video CD/SVCD, Audio CD

"TRACK" is selectable.



- 4** Press the **number keys** to enter the desired item number, then press **ENTER**.

- Playback starts from the selected section.

Examples:

- 1** To select track 5, press the **number key "5"**.
- 2** To select track 15, press the **number key "1"** and **"5"**.
- 3** To select track 25, press the **number key "2"**, then **"5"**.

If you have specified a wrong selection

Press **CANCEL** (X) or **CLEAR** (■) to clear the wrong number, then enter the correct one before you press **ENTER** in this step.

To clear the on-screen bar

Press **ON SCREEN**.

NOTES:

- When "0" is displayed on the TV screen in step 4, the chapter you have selected is not contained in the disc, or chapter search does not work on the disc.
- Before you press **ENTER**, playback may start automatically when you enter the section's number depending on the disc.
- This function is not possible for a Video CD/SVCD with PBC function.

Time Search



You can play back a disc from the desired point by specifying the elapsed playing time from the beginning of a title (DVD-RAM, DVD-R, DVD-RW and DVD VIDEO) or a disc (Video CD/SVCD and Audio CD).

- 1** Press **ON SCREEN** twice to access the on-screen bar.
- 2** Press $\triangleleft \triangleright$ to select " $\odot \Rightarrow$ ", then press **ENTER**. The pop-up window appears under the selected item.



- 3** Press the **number keys** to enter the time, then press **ENTER**. Playback starts from the specified time.

Example:

To play back from a point 12 (minutes): 50 (seconds) elapsed.



If you have specified a wrong selection,

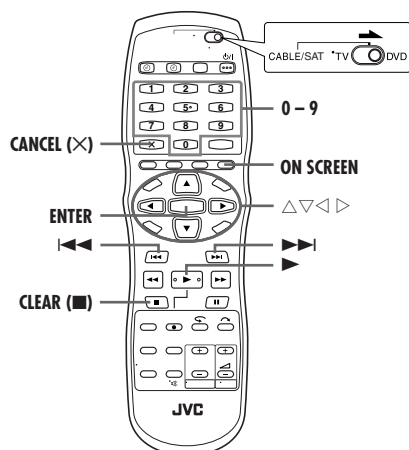
Press **CANCEL** (X) (for the last entered number) or **CLEAR** (■) (for whole numbers) to clear the wrong number, then enter the correct one(s) before you press **ENTER** in this step.

To clear the on-screen bar

Press **ON SCREEN**.

NOTES:

- When "0" is displayed on the TV screen in step 3, you have selected a point that exceeds the recording time of the disc.
- Some DVD VIDEO discs do not contain time information, and it is not possible to use the Time Search function. In such cases, "0" is displayed on the TV screen as well.
- This function is not possible for a Video CD/SVCD with PBC function.



Simulated Surround Effect



It is possible to get a simulated surround effect from your stereo system. You can enjoy the virtual surround sound with your 2-channel stereo system.

- 1 Press **ON SCREEN** twice to access the on-screen bar.
- 2 Press $\triangleleft \triangleright$ to select “”, then press **ENTER**.
 - Above the selected item, “3D-ON” appears and Simulated Surround Effect is activated.
 - Each time you press **ENTER**, “3D-ON” appears and disappears alternately.



To clear the on-screen bar

Press **ON SCREEN**.

To cancel the simulated surround effect

Press **ENTER** to clear “3D-ON” from the screen.

NOTES:

- The simulated surround effect works correctly only when playing back a title recorded in multichannels.
- Simulated Surround Effect does not affect the DVD VIDEO bitstream signal from the DIGITAL AUDIO OUTPUT connector.
- When Simulated Surround Effect is activated, the settings of “ANALOG AUDIO OUT” and “D. RANGE CONTROL” are disabled. (pg. 78)

Adjusting The Picture Quality



You can obtain optimal picture quality by selecting an appropriate picture mode.

- 1 Press **ON SCREEN** twice to access the on-screen bar.
- 2 Press $\triangleleft \triangleright$ to select “”, then press **ENTER**. The pop-up window appears under the selected item.



- 3 Press $\triangle \nabla$ to select the desired option, then press **ENTER**.

NORMAL: Normally select this option.

CINEMA: Suitable for a movie disc, etc.

SHARP: Clearer, sharper-edged picture when viewing images with lots of flat, same-coloured surfaces such as cartoons.

SOFT: Select this option when too much noise appears.

To clear the on-screen bar

Press **ON SCREEN**.

Setting The Progressive Mode



You can obtain optimal picture quality by selecting whether the content on the disc is processed by field (video source) or by frame (film source).

- 1 Press **ON SCREEN** twice to access the on-screen bar.
- 2 Press \triangle/∇ to select “”, then press **ENTER**. The pop-up window appears under the selected item.



- 3 Press \triangle/∇ to select the desired option, then press **ENTER**.

AUTO 1: Used to play a disc containing both video and film source materials. This system recognises the source type (video or film) of the current disc according to the disc information. Normally select this option.

AUTO 2: Almost the same as the “AUTO 1”, but the processing of the scenes with movement is different. Select “AUTO 1” or “AUTO 2” to your preference.

FILM: Suitable for playing back a progressive scanned film source disc.

VIDEO: Suitable for playing back a video source disc. The outlines on the played back pictures will be soft.

To clear the on-screen bar

Press **ON SCREEN**.

NOTE:

When the progressive mode is set, be sure to set “L-1 OUTPUT” to “COMPONENT”. (pg. 72) Progressive scan is output only from COMPONENT VIDEO OUT connector.

Programme Playback



You can play back up to 30 tracks in the desired order.

While stopped

- 1 Press **ON SCREEN** twice to access the on-screen bar.
- 2 Press \triangle/∇ to select “PRGM”, then press **ENTER**. The programme table appears under on-screen bar.



- 3 Press the **number keys** to enter the track numbers in the desired order.

Examples:

- 1 To select track 5, press the **number key “5”** and **ENTER**.
- 2 To select track 15, press the **number key “1”** and **“5”**.
- 3 To select track 25, press the **number key “2”** and **“5”**.



If you have specified a wrong selection

Press **CANCEL (X)**. The last selection is erased.

Or press **CLEAR (■)**. The whole selection is erased.

- 4 Press **▶**. Playback starts in the programmed order.

- When all of the programmed tracks have been played back, Programme Playback stops, but the programmed information remains.
- To add tracks to the end of the programme, perform steps 1 through 3.
- During Programme Playback, pressing **▶▶** skips to the next selection of the programme. Pressing **◀◀** returns to the beginning of the current selection.

To clear the on-screen bar and the contents of the programme

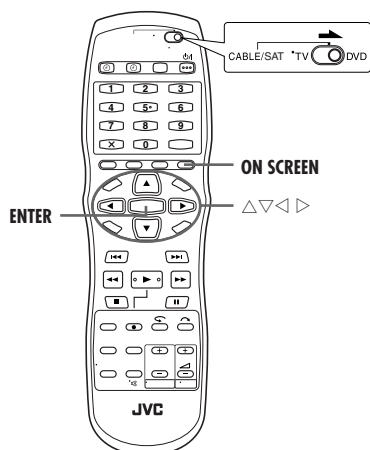
Press **ON SCREEN**.

To cancel Programme Playback

Press \triangle/∇ to select “PRGM”, then press **ENTER**.

NOTE:

Programme Playback is not possible depending on the type of disc.

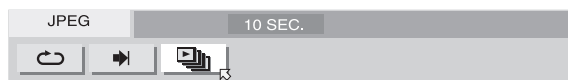


Select The Switching Interval Of The Slide Show



You can control the switching interval of the slide show.

- 1** Press **ON SCREEN** twice to access the on-screen bar.
- 2** Press ◀ ▶ to select "JPEG", then press **ENTER**. The pop-up window appears under the selected item.



- 3** Press Δ▽ to select the desired option, then press **ENTER**.
 - Each time you press Δ▽, the interval changes as follows:
 5 SEC. ↔ 10 SEC. ↔ 15 SEC. ↔ 20 SEC. ↔ 25 SEC. ↔ 30 SEC. ↔ (Back to the beginning)

To clear the on-screen bar

Press **ON SCREEN**.

Random Playback



You can play back all the tracks on the disc in random order.

While stopped

- 1** Press **ON SCREEN** twice to access the on-screen bar.
- 2** Press ◀ ▶ to select "RND", then press **ENTER**. Playback starts in random order.



To clear the on-screen bar

Press **ON SCREEN**.

To cancel Random Playback

Perform steps **1** and **2**.

NOTE:

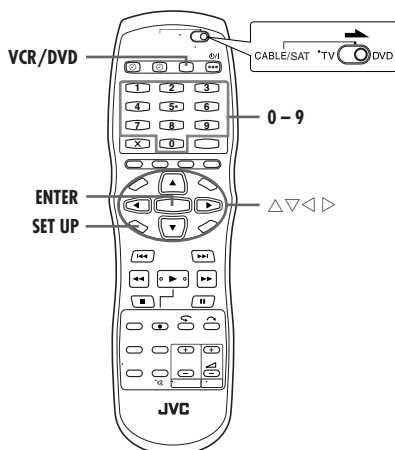
The same track will not be played back more than once during Random Playback.

Parental Lock



This function restricts playback of DVD VIDEO discs which contain violent (and other) scenes according to the level set by the user. For example, if a movie which includes violent scenes supports the parental lock feature, such scenes which you do not want to let children view can be cut or replaced by other scenes.

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



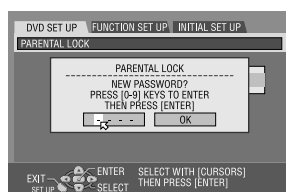
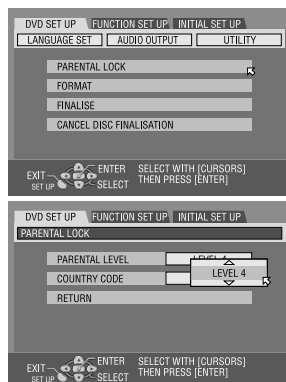
To Set Parental Lock For The First Time

While stopped

- 1 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.
- 2 Press **SET UP** to access the Main Menu screen.
- 3 Press \triangle/∇ to select "DVD SET UP", then press **ENTER**.
- 4 Press \triangle/∇ to select "UTILITY", then press **ENTER**.
- 5 Press \triangle/∇ to select "PARENTAL LOCK", then press **ENTER**.

- 6 Press \triangle/∇ to select "PARENTAL LEVEL", then press **ENTER**.
- 7 Press \triangle/∇ to select the desired level, then press **ENTER**.
 - The smaller the value of level is, the more restrictive the Parental Lock level becomes.
 - Select "NONE" to cancel the restriction.

- 8 Press the **number keys** to enter your desired four-digit number, then press **ENTER**.
 - If you made a mistake, enter a correct number again.
- 9 Press \triangle/∇ to select "COUNTRY CODE", then press **ENTER**.
- 10 Press \triangle/∇ to select your country code, then press **ENTER**.
 - If you do not need to change your country code, jump to 12.
 - See "Country/Area Code List for Parental Lock" (pg. 97).



11 Press the **number keys** to enter the same password as in step 8 above, then press **ENTER**.

12 Press **SET UP** twice to complete the setting.

NOTE:

Remember your password, or make a note of it.

To Change The Settings

You can change the Parental lock settings later.

1 Perform steps 1 to 5 of "To Set Parental Lock For The First Time" to access the "PARENTAL LOCK" screen before continuing.

To change the level

2 Press \triangle/∇ to select "PARENTAL LEVEL", then press **ENTER**.

3 Press \triangle/∇ to select the desired level, then press **ENTER**.

To change the country code

4 Press \triangle/∇ to select "COUNTRY CODE", then press **ENTER**.

5 Press \triangle/∇ to select your country code, then press **ENTER**.

• See "Country/Area Code List for Parental Lock" (pg. 97).

6 Press the **number keys** to enter the same password as in step 8 of "To Set Parental Lock For The First Time", then press **ENTER**.

7 Press **SET UP** twice to complete the setting.

NOTE:

If you forget your password, enter "8888" in step 6.

To Temporarily Release Parental Lock

When you set the parental lock level strictly, some discs may not be played back at all. When you insert such a disc and try to play it back, the confirmation screen appears on the TV screen, asking you whether you want Parental Lock to be temporarily released or not.

1 Load a disc.

• If the disc is rated higher than the selected level, the confirmation screen appears.

2 Press \triangle/∇ to select "YES", then press **ENTER**.

• If you select "NO", you cannot play back that disc.

3 Press the **number keys** to enter the same password as in step 8 of "To Set Parental Lock For The First Time", then press **ENTER**.

- When you enter the correct password, the Parental Lock is released and the unit starts playback.
- If you enter a wrong password, "ENTRY ERROR RETRY" appears on the TV screen. Enter the correct password.
- If you have successively entered wrong password three times, "ENTRY ERROR CAN NOT CHANGE PASSWORD" appears on the TV screen. In such a case, press **ENTER**. The disc will stop. Then play back the disc again, and try the procedure again from step 1.

NOTE:

If you forget your password, enter "8888" in step 3.

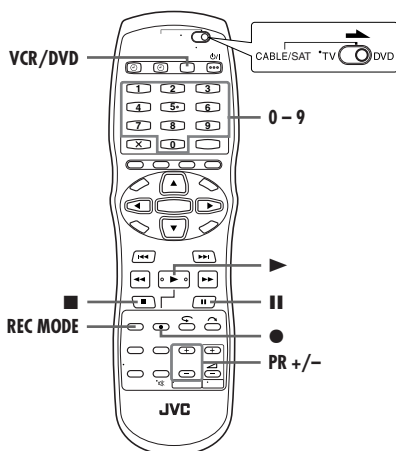
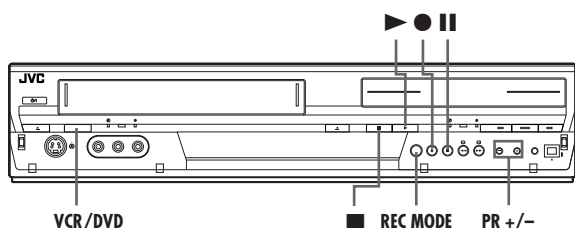
Basic Recording



- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.

ATTENTION:

It is not possible to record programmes on a DVD-R disc which has already been finalised.



- 1 Load a recordable disc.
 - For details, refer to "Placing A Disc" (pg. 9).
- 2 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.
- 3 Press **PR +/-** or the **number keys** to select the channel you wish to record.
- 4 Press **REC MODE** repeatedly to set the recording mode.
 - Each time you press **REC MODE**, the recording mode changes as follows:
 XP → SP → LP → EP → FR → (Back to the beginning)
 - * The value is selectable from 1 to 6 hours in 5-min. increment, from 7 to 8 hours in 1-hour increment by pressing **<D>** repeatedly after selecting "FR60–FR360", "FR420" and "FR480". To change the value in 30-min. increments, press and hold **<D>**.
 - For details on the recording mode, see the right column.
- 5 Press **●** on the unit to start recording. Or press and hold **●** and press **▶** on the remote control.
 - The DVD recording lamp lights up on the unit.
- 6 Press **II** to pause recording.
 - To resume recording, press **▶**.
- 7 Press **■** to stop recording.
 - The DVD recording lamp lights off on the unit.
 - It takes about 5 seconds to end the writing session when you stop recording.

NOTES:

- It is recommended to format a DVD-RAM disc before use if you use the disc on this unit for the first time.
- When using a brand-new DVD-RW disc, format the disc either in VR mode or in Video mode. (pg. 86)
- Recordings made on DVD-R/RW disc must be finalised to play back on other DVD players. Perform "Finalise A Disc (DVD Deck Only)" (pg. 87).
- You can record up to 99 programmes and 999 play lists on each disc.
- Some programmes can only be recorded one time.
- When recording is started, an index of the first part of recording is automatically recorded. (pg. 57) To record satellite programmes, refer to page 48. To delete the index, refer to page 59.
- Recording sometimes may stop or cannot be performed even if there is enough available capacity remaining on the disc.

Recording Resume Function

If there is a power outage during recording, Instant Timer Recording (ITR) (pg. 41) or timer recording (pg. 43, 44, 45), the recording will resume automatically when power is restored to the unit unless the unit's memory backup has expired.

Recording Mode

MPEG2 format is used as recording format. As a guide for picture quality, the "bps" unit is used to represent how much data can be recorded per second. The larger this value is, the better the picture quality becomes but more capacity is required for the recording. Select XP or SP for programmes where quick movement occurs, such as sports programmes, and LP or EP for talk shows, etc. with relatively less movement.

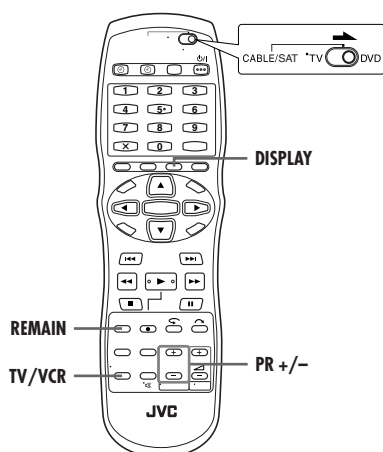
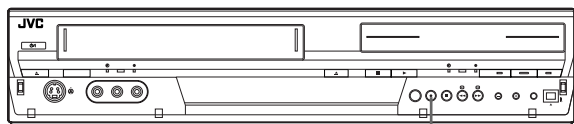
The recording modes for a 4.7 GB disc are set as follows:

Recording mode	Recording amount (approx.)	Maximum recording time (approx.)
XP	10 Mbps	1 hour
SP	5 Mbps	2 hours
LP	2 Mbps	4 hours
EP	1.6 Mbps	6 hours
FR60–FR360 (pg. 42)	The amount varies depending on the selected time.	1 – 6 hours
FR420		7 hours
FR480		8 hours

Recording Features



- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.
- Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.



Instant Timer Recording (ITR)

This easy method lets you record for from 30 minutes to 6 hours (selectable in 30-min. increments), and shuts the unit off after recording is finished.

- 1 Press **●** on the unit to start recording.
- 2 Press **●** again to engage the ITR mode.
 - On the front display panel, "0:30" appears.
- 3 If you want to record for more than 30 minutes, press **●** to extend the time. Each press extends recording time by 30 minutes.

NOTES:

- You can only perform ITR using the **●** button on the unit.
- If "DIRECT REC" is set to "ON" (pg. 79), Instant Timer Recording (ITR) does not work.
- When the recording capacity becomes full during timer recording or Instant Timer Recording, the unit is automatically shut off.

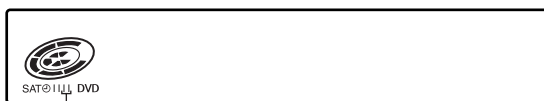
Watch Another Programme While Recording On The Unit

While recording is going on, you can watch another programme on the TV by using the TV's tuner.

NOTE:

It is required that the remote control is set to be able to operate the TV in advance. (pg. 74)

- 1 During recording, press **TV/VCR** to select TV mode if your unit is connected to the TV via the RF connection.
- VCR mode is disengaged, then the VCR indicator lights off and "TV" appears on the front display panel.



VCR indicator lights off.

- The programme received on the TV's tuner is displayed on the TV screen.

- 2 Slide the **TV/CABLE/SAT/DVD** switch to **TV**.

- 3 Press **PR +/-** repeatedly to select the desired channel.

NOTE:

If a decoder is connected to the unit (pg. 77), you can select a scrambled channel as well as other normal channels.

Elapsed Recording Time And Disc Remaining Time Indication

During recording, press **DISPLAY** repeatedly until the desired indication appears on the front display panel.

- Each time you press **DISPLAY**, the time indication changes as follows:
Elapsed recording time → Disc remaining time → Clock → (Back to the beginning)
- There is another way to check the disc remaining time. While the unit is stopped or recording is in progress, press **REMAIN**. The list of disc remaining times for all recording modes appears on the TV screen.

Free Rate Function

To record the entire programme, the unit automatically set the appropriate recording mode depending on the combination of the total time of the programme to be recorded and either the remaining disc space or the specified recording time (from 60 minutes to 480 minutes).

■ To record the entire programme within the actual remaining disc space

Select "FR (JUST)" in a recording mode selection procedure. (pg. 43, 45)

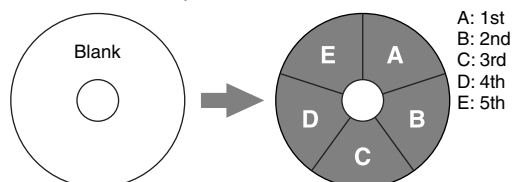
- Note that this function is available only for timer programming recording.

■ To record the entire programme by specifying the desired recording time

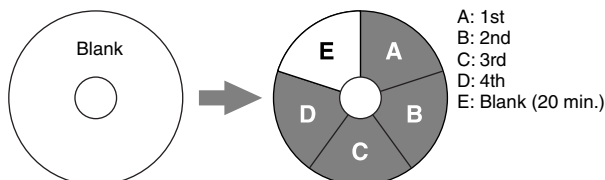
Select "FR60–FR360", "FR420" or "FR480" in a recording mode selection procedure. (pg. 40, 43, 45)

■ To record a 25-min. long daily programme five times just on a same disc for example

Perform "SHOWVIEW" Timer Programming" (pg. 43) procedure. Be sure to set the recording mode to "FR125" and set Weekly/Daily Rec Function to "MON–FRI" in step 6 to fit the total recording time to the whole disc space.



When the same programme is recorded in SP mode instead of in "FR125", the 5th programme cannot be recorded.



NOTES:

- You can programme this unit to timer-record, regardless of the disc remaining time. When the disc remaining time is not enough, recording may stop in the middle of a programme. To avoid this, make sure of the disc remaining time before setting timer-programming. **(Example)** If you programmed to timer-record for 60 minutes in SP mode on a 120-minute disc, the disc remaining time would be 30 minutes in XP mode, 60 minutes in SP mode, 120 minutes in LP mode, 180 minutes in EP mode, and 240 minutes in FR480 mode. Timer-recording will not complete beyond these remaining times.
- The maximum recording time of FR (JUST) mode is the same as the recording time of FR480 mode. When timer-programming a long programme in FR (JUST) mode on a disc whose remaining time is short, it is recommended checking the disc remaining time in FR480 mode to see if the remaining time is enough for the programme.
- Even if more than one programme are timer-programmed in FR (JUST) mode, only the first one is recorded.
- In order to ensure that the recording fits on the disc, this feature may leave a slight non-recorded section at the end of the disc.
- There may be some noise and sound disturbance at the point on the disc where the unit switches the mode.

Receiving Stereo And Bilingual Programmes

Your unit is equipped with a Sound-Multiplex decoder (A2) and a Digital stereo sound decoder (NICAM) making reception of stereo and bilingual broadcasts possible.

When the channel is changed, the type of broadcast being received will be displayed on the TV screen for a few seconds.

Type of Broadcast Being Received	On-screen Display
A2 Stereo	
A2 Bilingual	
Regular Monaural	
NICAM Stereo	
NICAM Bilingual	
NICAM Monaural	

NOTES:

- "SUPERIMPOSE" must be set to "AUTO". Otherwise the on-screen displays will not appear. (pg. 79)
- If the quality of stereo sound being received is poor, the broadcast might be received in monaural with better quality.

Selection Of The Audio Channel To Be Recorded On A Disc

When a programme is recorded on a DVD-RAM or DVD-RW disc in VR mode, all audio channels of the receiving programme are recorded on the disc. When you record a programme on a DVD-R or DVD-RW disc in video mode, select the desired audio channel (from among "NICAM 1/MAIN", "NICAM 2/SUB", "MONO") to be recorded on the disc. (pg. 79)

NOTE:

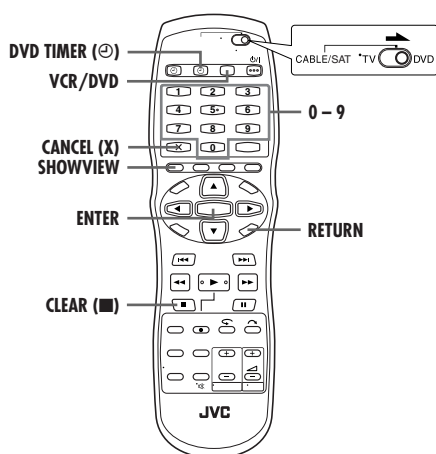
Before playing back a programme recorded in stereo, or a bilingual programme, refer to "Audio Channel Selection" on page 28.

SHOWVIEW™ Timer Programming

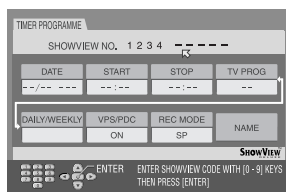


You can programme this unit to timer-record as many as 8 programmes.
With the SHOWVIEW system, timer programming is greatly simplified because each TV programme has a corresponding code number which your unit is able to recognise.
You can use the remote control to enter the SHOWVIEW number.

- Make sure that the unit's built-in clock is set properly.
- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



- 1 Load a recordable disc.
- 2 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.
- 3 Press **SHOWVIEW** to access the SHOWVIEW screen.
- 4 Press the **number keys** to enter the SHOWVIEW number of a programme you wish to record, then press **ENTER**.
 - If you have made a mistake, press **CANCEL (X)** and input the correct number before you press **ENTER**.
 - To clear all entered numbers at a time, press **CLEAR (■)**.
 - If the number you entered is invalid, "SHOWVIEW NO. ERROR CONFIRM SHOWVIEW NO. THEN RETRY" appears on the TV screen. Input a valid SHOWVIEW number.
 - If "GUIDE PROGRAMME IS NOT SET SELECT CHANNEL YOU WANT TO RECORD" appears on the TV screen, set Guide Program numbers manually. (⌘ pg. 82)
 - When "PROGRAMME FULL DELETE UNWANTED TIMER PROGRAMME" appears on the TV screen, you need to cancel some of the reserved programmes. (⌘ pg. 47)
- 5 The SHOWVIEW number you entered and the matching timer-recording information are displayed on the TV screen. Check the programme data.
 - To cancel this setting, press **SHOWVIEW** or **RETURN**.



IMPORTANT:

Make sure the channel position number you wish to record is displayed; if not, see "SHOWVIEW™ System Setup" (⌘ pg. 82) and set the Guide Program number correctly.

- 6 Press **◀▶** to select the desired recording option as required. Press **△▽** to select the desired setting, then press **ENTER**.
 - "STOP" (To advance/go back the stop time by 30 minutes, press and hold **△▽**).
 - "DAILY/WEEKLY" (⌘ pg. 43, "Daily/Weekly Recording")
 - "REC MODE" (⌘ pg. 40, "Recording Mode")
 - "NAME" (⌘ pg. 59, "Modify Programme Name")
 - "VPS/PDC" (⌘ pg. 44, "VPS/PDC Recording")
- 7 Press **ENTER** to access the Programme Confirmation screen.
- 8 Press **ENTER** to complete timer programming.
 - To programme another timer, repeat steps **3 – 8**.
 - If "PROGRAM OVERLAPPED" appears on the TV screen, see page 47.
- 9 Press **DVD TIMER (⌚)** to engage the unit's timer mode. The DVD timer lamp lights up on the unit and the VCR deck is automatically selected. Press **⏻** to turn off the unit. When the VCR deck is in timer standby mode, the unit is automatically turned off.
 - To disengage the timer mode, press **DVD TIMER (⌚)** again.

NOTES:

- There may be cases that SHOWVIEW Timer Programming function prolongs the stop time of the programming.
- When two successive programmes are recorded on a DVD-RW disc with SHOWVIEW Timer Programming function, the beginning of the second one may be left off the recording.
- SHOWVIEW Timer Programming is not possible on the discs used exclusively for On-Disc Timer Programming.
- If the copy limited programme is received during timer-recording, the unit enters Record Pause mode. Recording starts again if it is switched to a recordable broadcast during the time you programmed.

IMPORTANT:

If you have moved to a different area or if a broadcasting station's programme number has been changed, the wrong programme number will be displayed on the SHOWVIEW programme screen in step 5. When this happens, set the correct Guide Program number for that station. (⌘ pg. 82, "SHOWVIEW™ System Setup")

Satellite Receiver Users

To timer-record a satellite broadcast using the SHOWVIEW system:

- 1 Perform "Satellite Receiver Control Setting (DVD Deck Only)" (⌘ pg. 21).
- 2 Perform "SHOWVIEW™ Timer Programming" (⌘ pg. 43).
- 3 Leave the satellite receiver's power on.

Daily/Weekly Recording

You can record programmes with one of the following weekly/daily timer settings.

WEEKLY: Select to record a weekly programme.

MON–FRI: Select to record a daily programme from Monday through Friday.

MON–SAT: Select to record a daily programme from Monday through Saturday.

SUN–SAT: Select to record a daily programme from Sunday through Saturday.

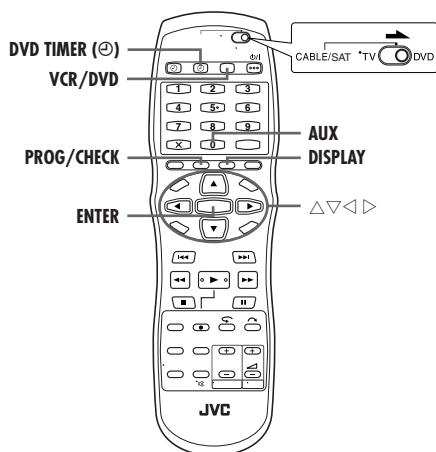
Manual Timer Programming



You can programme this unit to timer-record as many as 8 programmes.

If you do not know the SHOWVIEW number for the programme you wish to record, use the following procedure to set your unit to timer-record the programme.

- Make sure that the unit's built-in clock is set properly.
- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



1 Load a recordable disc.

2 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.

3 Press **PROG/CHECK** to access the Programme Check screen.

- When "PROGRAMME FULL DELETE UNWANTED TIMER PROGRAMME" appears on the TV screen, you need to cancel some of the reserved programmes. (➤ pg. 47)

4 Press $\Delta \nabla$ to select "NEW TIMER PROGRAMME", then press **ENTER**. The programme screen appears.

5 Press $\Delta \nabla$ to set the desired date.

- The current date appears on the TV screen. The date you enter appears in its place.

6 Press $\Delta \nabla$ to select "START", then press $\Delta \nabla$ to set the desired start time.

- Each press of $\Delta \nabla$ advances/goes back the start time in 1-min. increments.
- To advance/go back the start time in 30-min. increments, press and hold $\Delta \nabla$.

7 Press $\Delta \nabla$ to select "STOP", then press $\Delta \nabla$ to set the desired stop time.

- Each press of $\Delta \nabla$ advances/goes back the stop time in 1-min. increments.
- To advance/go back the stop time in 30-min. increments, press and hold $\Delta \nabla$.

8 Press $\Delta \nabla$ to select "TV PROG", then press $\Delta \nabla$ to select the desired channel.

9 Set the other recording options as required.

- Refer to step 6 in "SHOWVIEW" Timer Programming" (➤ pg. 43).

10 Press **ENTER** to access the Programme Confirmation screen.

11 Press **ENTER** to complete timer programming.

- To programme another timer, repeat steps 3 – 11.

12 Press **DVD TIMER** (Ⓢ) to engage the unit's timer mode. The DVD timer lamp lights up on the unit and the VCR deck is automatically selected. Press $\phi/1$ to turn off the unit. When the VCR deck is in timer standby mode, the unit is automatically turned off.

- To disengage the timer mode, press **DVD TIMER** (Ⓢ) again.

NOTES:

- When two successive programmes are recorded on a DVD-RW disc with Manual Timer Programming function, the beginning of the second one may be left off the recording.
- If the copy limited programme is received during timer-recording, the unit enters Record Pause mode. Recording starts again if it is switched to a recordable broadcast during the time you programmed.

Satellite Receiver Users

To timer-record a satellite broadcast using Manual Timer Programming:

- 1 Perform "Satellite Receiver Control Setting (DVD Deck Only)" (➤ pg. 21).
- 2 Perform "Manual Timer Programming" (➤ pg. 44). In step 8, press **AUX** to change "TV PROG" to "SAT". Then press $\Delta \nabla$ to enter the channel position for the satellite broadcast. In step 9, you cannot set "VPS/PDC" to "ON".
- 3 Leave the satellite receiver's power on.

VPS/PDC Recording

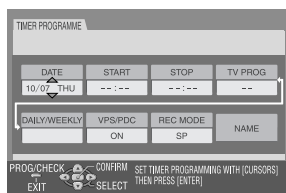
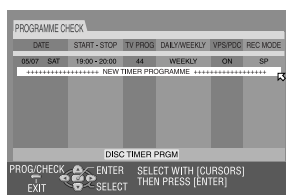
Now available from some TV stations, PDC (Programme Delivery Control) and VPS (Video Programme System) are services designed to assure safe, accurate timer recording. With this system, special code signals are transmitted together with the audio/video signals. These code signals control your video unit and have precedence over the advertised times you may have preset into the timer. This means that your unit will start and stop recording when the preset TV programmes actually start and end — even if the broadcast time of a preset TV programme is changed.

NOTES:

- When you use Manual Timer Programming, set the start time (VPS or PDC time) exactly as advertised in the TV listing. A different time than advertised will result in no recording.
- VPS/PDC recording is also possible when a satellite receiver or a cable system is connected to L-2 IN/DECODER connector on your unit.
- VPS/PDC recording is also possible via the L-1 IN/OUT connector.

How to check if the station being received transmits a VPS/PDC signal

- 1 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.
- 2 Hold down **DISPLAY** for about 5 seconds. "VPS/PDC" appears blinking on the front display panel. If a VPS/PDC signal is detected from the station, "VPS/PDC" will stop blinking. If no VPS/PDC signal is detected from the station, "VPS/PDC" will blink at a slower rate.
- 3 Press **DISPLAY** again to return to normal display.



On-Disc Timer Programming



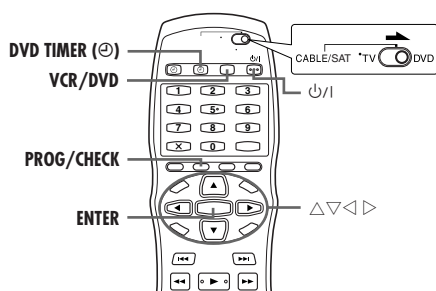
On-Disc Timer Programming is a function used with discs that are especially intended for a specific programme. The disc is then programmed for a programme you always watch every day or every week. Since older programmes are automatically overwritten, a single DVD-RAM/RW (VR mode) disc can be used without worrying about how much recording capacity remains. (pg. 46)

You can programme each disc to timer-record as many as 8 programmes.

- Make sure that the unit's built-in clock is set properly.
- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.

ATTENTION:

- On-Disc Timer Programming is possible only with the disc for On-Disc Timer Programming.
- If data is recorded on a disc for On-Disc Timer Programming using a unit from another manufacturer, On-Disc Timer Programming may no longer function properly.



To Make The Disc For On-Disc Timer Programming

- 1 Load a recordable disc.
- 2 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.
- 3 Press **PROG/CHECK** to access the Programme Check screen.
- 4 When On-Disc Timer Programming is made for the first time on the disc
Press $\Delta\triangledown$ to select "DISC TIMER PRGM", then press **ENTER**.
 - When some programmes are recorded on the disc, a caution message appears. In such a case, backup the programmes as required, then format the disc before making On-Disc Timer Programming. (pg. 86)

When On-Disc Timer Programming has already been made on the disc

Press $\Delta\triangledown$ to select "NEW TIMER PROGRAMME", then press **ENTER**.

- 5 Press $\Delta\triangledown$ to set the desired date.
 - The current date appears on the TV screen. The date you enter appears in its place.
- 6 Press $\triangleleft\triangleright$ to select "START", then press $\Delta\triangledown$ to set the desired start time.
 - Each press of $\Delta\triangledown$ advances/goes back the start time in 1-min. increments.
 - To advance/go back the start time in 30-min. increments, press and hold $\Delta\triangledown$.
- 7 Press $\triangleleft\triangleright$ to select "STOP", then press $\Delta\triangledown$ to set the desired stop time.
 - Each press of $\Delta\triangledown$ advances/goes back the stop time in 1-min. increments.
 - To advance/go back the stop time in 30-min. increments, press and hold $\Delta\triangledown$.

8 Press $\triangleleft\triangleright$ to select "TV PROG", then press $\Delta\triangledown$ to select the desired channel.

9 Set "DAILY/WEEKLY" option.

- Refer to step 6 in "SHOWVIEW" Timer Programming" (pg. 43).
- It is necessary to set "DAILY/WEEKLY" option for On-Disc Timer Programming. (pg. 43, "Daily/Weekly Recording")

10 Set the other recording options as required.

- You can select XP, SP, LP, EP or FR480 mode for "REC MODE". However, you cannot select FR (JUST), FR60-FR360 and FR420.
- Refer to step 6 in "SHOWVIEW" Timer Programming" (pg. 43).
- It is not possible to use the Free Rate function. (pg. 42)

11 Press **ENTER** to access the Programme Confirmation screen.

12 Press **ENTER** to complete timer programming.

- To programme another timer, repeat steps 3 – 12.

Satellite Receiver Users

To timer-record a satellite broadcast using the On-Disc Timer Programming function:

- 1 Perform "Satellite Receiver Control Setting (DVD Deck Only)" (pg. 21).
- 2 Perform "On-Disc Timer Programming" (pg. 45). In step 10, you cannot set "VPS/PDC" to "ON".
- 3 Leave the satellite receiver's power on.

To Timer-record The Programme With The Programmed Disc

1 Load a programmed disc.

2 Press **DVD TIMER (⊙)**. The unit turns off and "DISC" appears on the front display panel. The DVD timer lamp also lights up on the unit and the VCR deck is automatically selected. Press ψ/I to turn off the unit. When the VCR deck is in timer standby mode, the unit is automatically turned off.

- To disengage the timer mode, press ψ/I again.

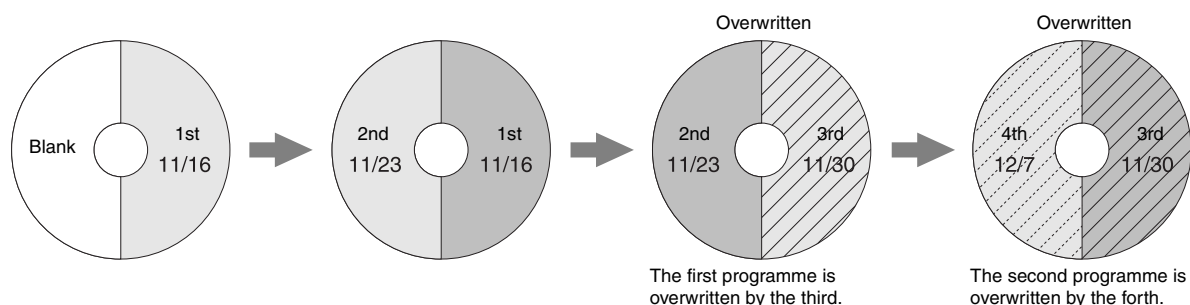
NOTES:

- Even if On-Disc Timer Programming is overlapping with other timer programming, any caution message does not appear. In such a case, recording will be executed in the descending order of the recording start time of the programme.
- On-Disc Timer Programming is not possible on a DVD-RW disc formatted in video mode. (pg. 86)
- The information of a programme recorded with On-Disc Timer Programming is not stored in the library. (pg. 63)
- The play list is not created for the programmes recorded with On-Disc Timer Programming. (pg. 60)
- SHOWVIEW Timer Programming is not possible on the discs used exclusively for On-Disc Timer Programming.
- Manual Timer Programming is not possible on the On-Disc Timer Programmed disc. (pg. 44)
- Basic Recording is not possible on the On-Disc Timer Programmed disc. (pg. 40)
- The On-Disc Timer Programming function does not work on the unit from other manufacturers even if the On-Disc Timer Programmed disc is loaded.
- The beginning of a programme may not be recorded. Also, if the 1st programme's recording stop time and the 2nd programme's recording start time is the same, the ending of the 1st programme may not be recorded.
- If there is a power cut while recording, the recordings before the power cut are not guaranteed.

How Discs Are Overwritten

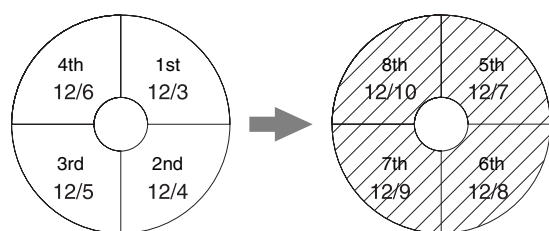
(Example 1)

To record a 1-hour serial drama every Friday in SP mode



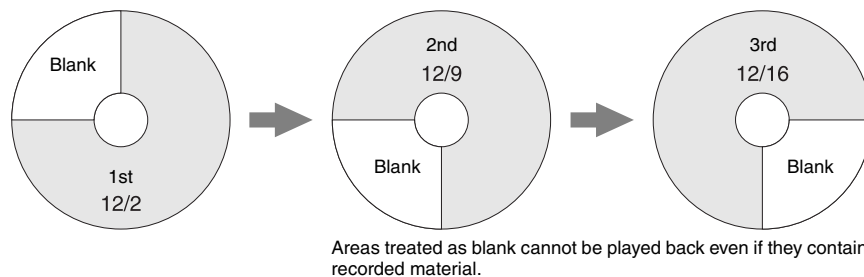
(Example 2)

To record a 15-minute serial drama every morning in XP mode



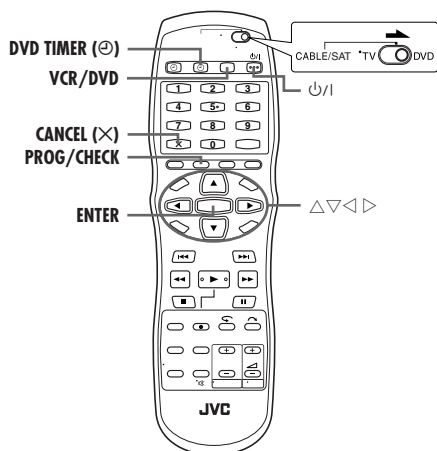
(Example 3)

To record a 90-minute serial drama every Sunday in SP mode



NOTES:

- On-Disc Timer Programming may not always work as these examples.
- On-Disc Timer Programming may not complete successfully if the recording stop time is extended due to VPS/PDC.



Check, Cancel And Change Programmes

1 When the DVD timer lamp lights on the unit
Press **DVD TIMER** (⊖), then press **P/I**.

When "**DISC**" lights on the front display panel and the **DVD timer lamp** also lights up on the unit.
Press **P/I**.

When "**SAT**" lights on the front display panel
Press **SAT**⊖ on the unit, then press **P/I**.

When the **DVD lamp** does not light up on the unit
Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.

2 Press **PROG/CHECK** to access the Programme Check screen.

- To return to the previous screen after you check the programme, press **PROG/CHECK** again.

To cancel the programme
Press **△▽** to select a programme to be cancelled, then press **CANCEL** (X).

3 Press **△▽** to select the programme, then press **ENTER**. The programme screen appears.

4 Change the settings of the desired recording options as required.

- Refer to steps 5 – 10 in "Manual Timer Programming" (pg. 44).

5 Press **PROG/CHECK** to complete timer correction. The previous screen resumes.

6 For **SHOWVIEW**, **Manual** or **On-Disc Timer Programming**
Press **DVD TIMER** (⊖).

For Automatic Satellite Programme Recording

Press **SAT**⊖ on the unit for 2 seconds or more.

- The DVD timer lamp also lights up on the unit and the VCR deck is automatically selected. When the VCR deck is in timer standby mode, the unit is automatically turned off.

DATE	START-STOP	TV PROG	DAILY/WEEKLY	WFS/PGC	REC MODE
05/07 SAT	19:00-20:00	44	WEEKLY	ON	SP
06/07 THU	22:00-22:30	16	WEEKLY	ON	SP
11/07 FRI	8:00-9:00	28		ON	LP
11/07 FRI	8:30-9:30	30		ON	LP

***** NEW TIMER PROGRAMME *****

DISC TIMER PROG

PROG/CHECK ENTER SELECT WITH (CURSORS) THEN PRESS [ENTER]

EXIT SELECT

When Programmes Overlap Each Other

If "PROGRAM OVERLAPPED" appears, you have another programme overlapping the programme you have just made. Confirm with the arrow on "OK", then press **PROG/CHECK**. Programme Check screen appears and conflicting programmes will be highlighted in pink.

Example: Programme 3 (you have just made) and Programme 4 overlap each other.

1 Confirm the overlapping programmes. Overlapping programmes appear on the TV screen.

DATE	START-STOP	TV PROG	DAILY/WEEKLY	WFS/PGC	REC MODE
05/07 SAT	19:00-20:00	44	WEEKLY	ON	SP
06/07 THU	22:00-22:30	16	WEEKLY	ON	SP
11/07 FRI	8:00-9:00	28		ON	LP
11/07 FRI	8:30-9:30	30		ON	LP

***** NEW TIMER PROGRAMME *****

DISC TIMER PROG

PROG/CHECK ENTER SELECT WITH (CURSORS) THEN PRESS [ENTER]

EXIT SELECT

NOTE:

If you do not mind this overlap, press **PROG/CHECK** to finish the timer programme setting. The programme with the lower programme number will be recorded and the other one will not be recorded correctly. If no changes are made for approximately 1 minute, the unit will return to the normal screen.

2 Press **△▽** to select the desired programme to be cancelled or changed.

To cancel the programme

Press **CANCEL** (X).

- "THE TIMER PROGRAMMING SETTING WAS CANCELLED" appears on the TV screen for about 5 seconds, then the normal screen resumes.

To change the programme setting

Press **ENTER**, then go to step 3.

3 Change the programme setting.

- Refer to steps 5 – 10 in "Manual Timer Programming" (pg. 44).

4 Press **PROG/CHECK** to check if the conflict has been settled. Programme check screen appears.

5 Engage the unit's timer mode.

- Refer to step 6 in "Check, Cancel And Change Programmes" (pg. 47).

NOTE:

When any overlaps remain after deletion and modification of programmes, Programme Check screen remains showing the conflicting programmes. In such a case, repeat the procedure above until the conflict is solved.

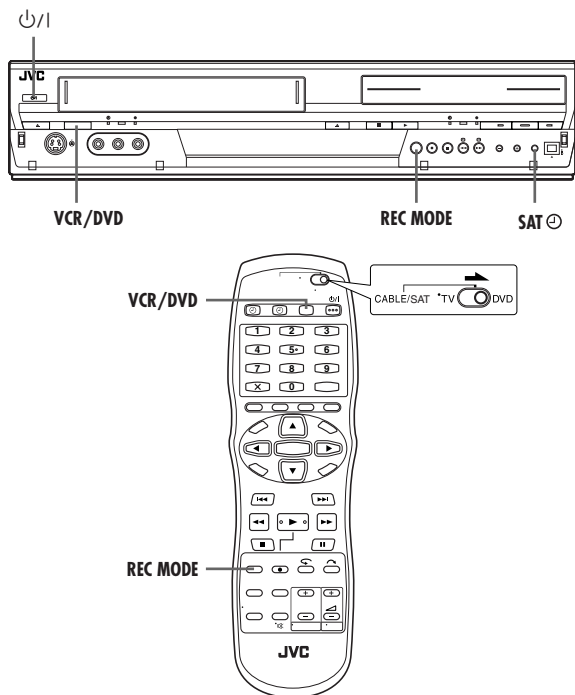
Automatic Satellite Programme Recording (DVD Deck Only)



This function allows you to automatically record a satellite programme which is timer-programmed on your external satellite receiver. Connect a satellite receiver to the unit's L-2 IN/DECODER connector and programme the timer on the satellite receiver. When the signals come into the unit from the satellite receiver, the unit automatically turns on and starts recording.

ATTENTION:

- Be sure not to turn on the satellite receiver before the programme is executed; otherwise, the unit will start recording when the satellite receiver's power is turned on.
- If you have connected another appliance other than a satellite receiver to the L-2 IN/DECODER connector, be sure not to engage the Automatic Satellite Programme Recording mode; otherwise, the unit will start recording when the connected appliance's power is turned on.
- Automatic Satellite Programme Recording and timer-recording cannot be done at the same time.



- Make sure the satellite receiver is connected to the unit's L-2 IN/DECODER connector.
- Programme the timer on the satellite receiver.
- Slide the TV/CABLE/SAT/DVD switch to DVD.

1 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.

2 Set "L-2 SELECT" to "SAT VIDEO" or "SAT S-VIDEO".

(pg. 72)

• Also refer to "IMPORTANT" on page 76.

3 Press **REC MODE** repeatedly to set the recording mode.

4 Press and hold **SAT** on the unit for about 2 seconds to engage the Automatic Satellite Programme Recording mode. "SAT" lights up on the front display panel and the VCR deck is automatically selected.

5 Press **⏻** to turn off the unit.

• "SAT" is displayed on the front display panel.

NOTES:

- To disengage the Automatic Satellite Programme Recording mode, press **SAT**.
- If the unit's power is off, it is not possible to engage the Automatic Satellite Programme Recording mode.
- In step 4, if "SAT" blinks quickly on the front display panel even though your satellite receiver's power is off, Automatic Satellite Programme Recording will not work properly with that satellite receiver*. If this is the case, perform "Manual Timer Programming" (pg. 44) to timer-record a satellite programme.
* Some satellite receivers output signals even if the power is off. Automatic Satellite Programme Recording is not possible with those satellite receivers.
- "SAT" blinks on the front display panel while Automatic Satellite Programme Recording is in progress.
- For timer programming of the satellite receiver, refer to the instruction manual of the satellite receiver.
- Automatic Satellite Programme Recording is not possible if your satellite receiver does not have a timer.
- Pressing the unit's **⏻** button while Automatic Satellite Programme Recording is in progress turns off the unit's power and disengages the Automatic Satellite Programme Recording mode.
- If there are more than one satellite programmes you wish to record with Automatic Satellite Programme Recording, it is not possible to set different recording modes for each programme.
- Depending on the type of satellite receiver, the unit may not record a slight portion of the beginning of the programme or may record slightly longer than the actual length of the programme.
- If you engage the Automatic Satellite Programme Recording mode when the satellite receiver's power is on, the unit will not start Automatic Satellite Programme Recording even though "SAT" blinks on the front display panel. When the satellite receiver shuts off once and is turned back on again, the unit starts recording.
- Just Clock (pg. 85) does not work when the Automatic Satellite Programme Recording mode is engaged.
- You can also record a programme from your cable system in the same way if the system has a timer.

About the Automatic Satellite Programme Recording indicator on the front display panel

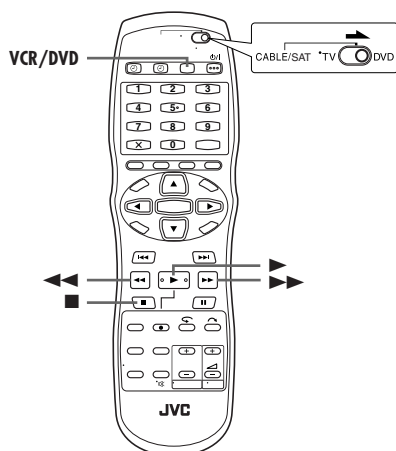
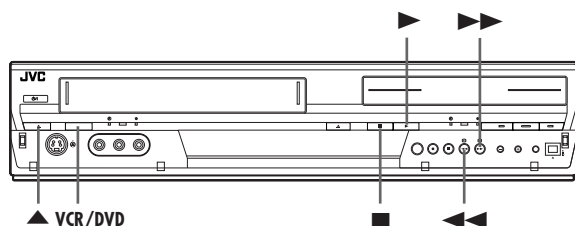
When the DVD deck is in the Automatic Satellite Programme Recording standby mode while the VCR deck is used, the following indicator lights up instead of "SAT" as illustrated.



Automatic Satellite Programme Indicator

Basic Playback

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



- 1** Load a cassette. Make sure the window side is up, the rear label side is facing you and the arrow on the front of the cassette is pointed toward the unit.
 - Do not apply too much pressure when inserting.
 - If the record safety tab has been removed, playback begins automatically.
 - The unit's power comes on automatically and the counter is reset to 0:00:00.
- 2** Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.
- 3** Find the programme start point. If the tape is advanced past the start point, press ◀◀. To go forward, press ▶▶.
- 4** Press ▶ to start playback.
 - "BEST" appears blinking on the front display panel during automatic tracking. (▶ pg. 53)
- 5** Press ■ to stop playback.
 - To eject the cassette, press ▲.

Clean the video heads using a dry cleaning cassette – ECL-3F – when:

- Rough, poor picture appears while a tape is played back.
- The picture is unclear or no picture appears.
- "USE CLEANING CASSETTE" appears on the screen (only with "O.S.D." set to "AUTO"). (▶ pg. 80)

NOTE:

The heads get dirty in the following cases:

- in an environment prone to extreme temperature or humidity
- in a dusty environment
- flaw, dirt or mold on video tapes
- continuous usage for a long time

Usable cassettes

Full-Size VHS

T-30 (ST-30**)
T-60 (ST-60**)
T90
T-120 (ST-120**)
T-160 (ST-160**)
ST-210**

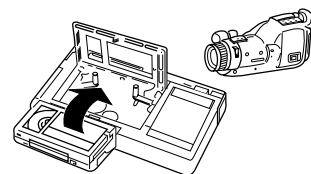
Compact VHS*

TC-20 (ST-C20**)
TC-30 (ST-C30**)
TC-40 (ST-C40**)

* Compact VHS camcorder recordings can be played on this unit. Simply place the recorded cassette into a VHS Cassette Adapter and it can be used just like any full-sized VHS cassette.

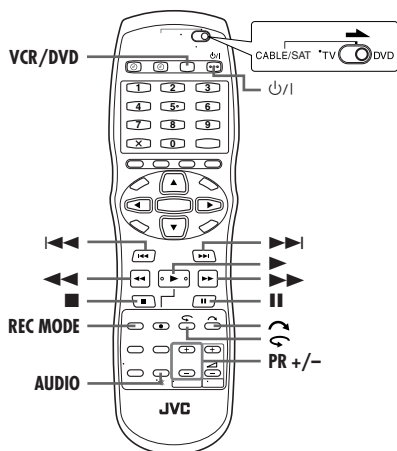
** This unit can record on regular VHS and Super VHS cassettes. However, it will record regular VHS signals only.

- S-VHS recording is not possible with this unit.
- This unit is equipped with SQPB (S-VHS QUASI PLAYBACK) that lets you watch tapes recorded in the S-VHS format and the SP mode with regular VHS resolution.
- SQPB does not deliver Super VHS resolution.



Playback Features

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.
- Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.



ATTENTION:

- In the search, still, slow-motion or frame-by-frame playback mode,
- the picture will be distorted.
 - the noise bars will appear.
 - there may be a loss of colour.
 - you cannot hear the sound.

Still Picture/Frame-By-Frame Playback

- 1 Press **II** to pause playback.
 - If there is vertical jitter, press **PR +/-** to correct the picture.
- 2 Press **II** to activate frame-by-frame playback.
 - To resume normal playback, press **▶**.

Slow Motion

- 1 Press **II** to pause playback.
- 2 Press and hold **II** for 2 seconds, then release. Press **II** and release again to return to still picture.
 - The speed changes for each direction by pressing **◀◀** and **▶▶** repeatedly.
 - To resume normal playback, press **▶**.

NOTE:

During slow motion playback, some noise may appear on the TV screen. Press **PR +** or **-** to eliminate the noises.

High-Speed Search

During playback, press **▶▶** for forward high-speed search, or **◀◀** for reverse high-speed search.

- Each press of the button increases the search speed for each direction.
When pressing **▶▶**:
(SP): +5x ↔ +7x
(EP): +11x ↔ +21x
When pressing **◀◀**:
Once **◀◀** is pressed, reverse search starts in -1x normal playback speed. After this process, each press of **◀◀** changes the search speed between -5x and -7x in SP mode, -11x and -21x in EP mode.
(SP): -1x → -5x ↔ -7x
(EP): -1x → -11x ↔ -21x
- To resume normal playback, press **▶**.

Quick Rewind A Little

During playback (or Live Memory Playback), press **↺**. The unit rewinds the picture a little (about 7 seconds) and resumes playback.

- If the button is pressed repeatedly, the unit rewinds the pictures continuously and resumes playback.

Skip Search

During playback, press **↷** 1 to 6 times to skip over unwanted sections.

- Each press initiates an approximately 30-second period of fast-motion playback. Normal playback resumes automatically.
- To resume normal playback, press **▶**.

Index Search

Your unit automatically marks index codes at the beginning of each recording. This function gives you quick access to any one of 9 index codes in either direction.

NOTE:

Before starting, make sure the unit is in the Stop mode.

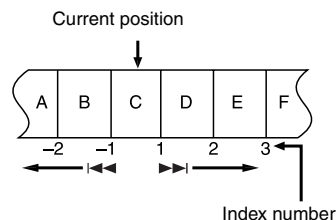
Press **◀◀** or **▶▶** to activate Index Search. "◀◀ 1" or "▶▶ 1" is displayed on the TV screen and search begins in the corresponding direction.

- To access index codes 2 through 9, press **◀◀** or **▶▶** repeatedly until the correct index number is displayed.

Example:

To locate the beginning of B from the current position, press **◀◀** twice.

To locate the beginning of D from the current position, press **▶▶** once.



- When the specified index code is located, playback begins automatically.

Next Function Memory

The Next Function Memory "tells" the unit what to do after rewinding. Before continuing, make sure the unit is in the Stop mode.

For Automatic Start Of Playback

Press ◀◀, then press ▶ within 2 seconds.

For Automatic Cassette Ejection After Tape Rewind

Press ◀◀, then press ▲ on the unit within 2 seconds.

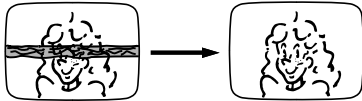
Repeat Playback

Your unit can automatically play back the whole tape 100 times repeatedly.

- 1 Press ▶ to start playback.
- 2 Press and hold ▶ for over 5 seconds, then release.
 - ⏮ lights up on the front display panel.
 - After playing back a tape 100 times, the unit stops automatically.
- 3 Press ■ at any time to stop Repeat Playback.
 - Pressing ▶, ◀◀, ▶▶ or || also stops Repeat Playback.

Manual Tracking

Your unit is equipped with automatic tracking control. During playback, you can override this and adjust the tracking manually by pressing the PR buttons.



- 1 During playback, press PR +/- on the unit simultaneously to activate manual tracking.
- 2 Press PR + or - to adjust the tracking manually.
 - Press REC MODE again to return to automatic tracking.

NOTE:

When a new tape is inserted, the unit enters the automatic tracking mode automatically.

Soundtrack Selection

Your unit is capable of recording three soundtracks (HI-FI L, HI-FI R and NORM) and will play back the one you select.

During Playback

Pressing AUDIO changes the soundtrack as follows:

TRACK	USE
On-Screen Display	
HI FI L ▶ ◀ R	For Hi-Fi stereo tapes
HI FI L ▶	For main audio of Bilingual tapes
HI FI ◀ R	For sub audio of Bilingual tapes
NORM	For audio-dubbed tapes
HI FI NORM	For audio-dubbed tapes

NOTES:

- "HI FI L ▶ ◀ R" should normally be selected. In this mode, Hi-Fi stereo tapes are played back in stereo, and the normal audio track is played back automatically for tapes with only normal audio.
- For instructions on recording stereo and bilingual programmes, refer to page 53.
- "O.S.D." must be set to "AUTO" or the on-screen displays will not appear. (pg. 80)

VHS Progressive Scan

You can watch the image on VCR deck in the Progressive scan mode via component video.

ATTENTION:

Your TV needs to be compatible with Progressive and to have Component video input connectors.

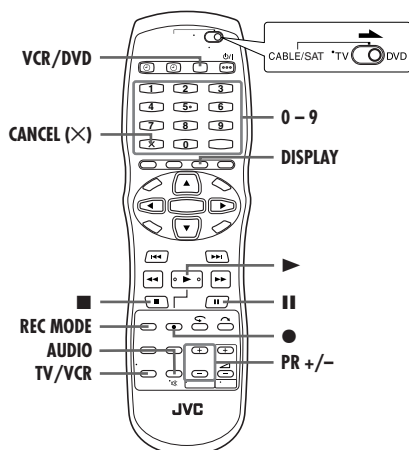
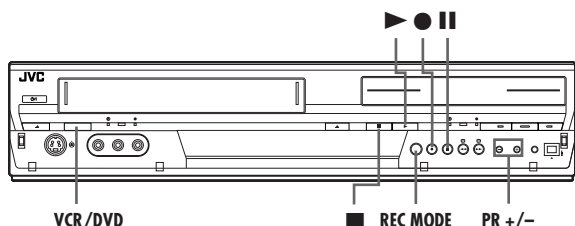
- 1 Set the Progressive-compatible TV to the component input mode.
- 2 Press VCR/DVD repeatedly so that the DVD lamp lights up on the unit, then press PROGRESSIVE SCAN for 3 or more seconds so that the Video output indicator (P) lights on the front display panel.
- 3 Press VCR/DVD repeatedly so that the VCR lamp lights up on the unit.
- 4 Press VCR→.
 - "VCR→" lights up on the unit.
- 5 Insert a cassette and press ▶.

NOTES:

- Be sure to engage the DVD deck in stop mode.
- It is not possible to perform the above steps when the DVD deck is in timer standby mode.
- If the image and sound is distorted, press VCR/DVD repeatedly.

Basic Recording

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



- 1 Load a cassette with the record safety tab intact.
 - The unit's power comes on automatically and the counter is reset to 0:00:00.
- 2 Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.
- 3 Press **PR +/-** or the **number keys** to select the channel you wish to record.
- 4 Press **REC MODE** repeatedly to set the recording mode.
- 5 Press **●** on the unit to start recording. Or press and hold **●** and press **▶** on the remote control.
 - The VCR recording lamp lights up on the unit.
 - If "O.S.D." is set to "ON" (pg. 80), "MARK" blinks on the screen while an index code is being marked.

B.E.S.T. takes place at the beginning of both the first SP and the first LP recording after inserting the cassette. (pg. 53)

If "DIRECT REC" is set to "ON", the programme that appears on the TV screen will be recorded. (pg. 79)

- 6 Press **||** to pause recording.
 - You can select channel during the Record Pause mode.
 - To resume recording, press **▶**.
- 7 Press **■** to stop recording.
 - The VCR recording lamp lights off on the unit.

Recording Resume Function

If there is a power outage during recording, Instant Timer Recording or timer recording (pg. 52, 54, 55), the recording will resume automatically when power is restored to the unit unless the unit's memory backup has expired.

Recording Features

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.
- Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.

Watch Another Programme While Recording On The Unit

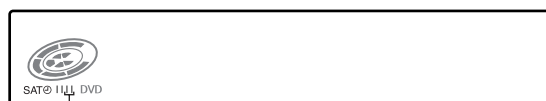
While recording is going on, you can watch another programme on the TV by using the TV's tuner.

NOTE:

It is required that the remote control is set to be able to operate the TV in advance. (pg. 74)

1 During recording, press **TV/VCR** to select TV mode if your unit is connected to the TV via the RF connection.

- VCR mode is disengaged, then the VCR indicator lights off and "TV" appears on the front display panel.



VCR indicator lights off.

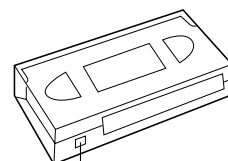
- The programme received on the TV's tuner is displayed on the TV screen.

2 Slide the **TV/CABLE/SAT/DVD** switch to **TV**.

3 Press **PR +/-** repeatedly to select the desired channel.

Accidental erasure prevention

To prevent accidental recording on a recorded cassette, remove its safety tab. To record on it later, cover the hole with adhesive tape.



Record safety tab

Elapsed Recording Time Indication

- 1 Press **DISPLAY** until a counter reading appears on the front display panel.
- 2 Press **CANCEL (X)** to reset the counter before starting recording or playback.
 - The counter is reset to "0:00:00" and shows the exact elapsed time as the tape runs. You can check the exact time of a recording or playback.

Instant Timer Recording (ITR)

This easy method lets you record for from 30 minutes to 6 hours (selectable in 30-min. increments), and shuts the unit off after recording is finished.

- 1** Press ● on the unit to start recording.
- 2** Press ● again to engage the ITR mode.
 - On the front display panel, "0:30" appears.
- 3** If you want to record for more than 30 minutes, press ● to extend the time. Each press extends recording time by 30 minutes.

NOTES:

- You can only perform ITR using the ● button on the unit.
- When the end of the tape is reached during timer recording or Instant Timer Recording, the cassette is automatically ejected and the unit is shut off.
- If "DIRECT REC" is set to "ON" (➤ pg. 79), Instant Timer Recording (ITR) does not work.
- During Instant Timer Recording, any other timer programmed recording won't start even if their start time has come. In such a case, the timer programmed recording starts (if the end time of the timer programmed recording is set after the end of Instant Timer Recording) after the Instant Timer Recording finishes.

Tape Remaining Time

- 1** Press **DISPLAY** until the time remaining on the tape appears.
- By pressing the **DISPLAY** button, you can change the display to show the clock time, counter reading or tape remaining time.

NOTES:

- When you press **DISPLAY**, the on-screen display appears on the TV screen for 5 seconds, then the displays other than the counter disappears. To clear the counter display, press **DISPLAY**.
- Depending on the type of tape being used, the tape remaining time reading may not appear right away, or is not correct. "— —:— —" may sometimes appear, or the display may blink on occasion.

Receiving Stereo And Bilingual Programmes

Your unit is equipped with a Sound-Multiplex decoder (A2) and a Digital stereo sound decoder (NICAM) making reception of stereo and bilingual broadcasts possible.

When the channel is changed, the type of broadcast being received will be displayed on the TV screen for a few seconds.

Type of Broadcast Being Received	On-screen Display
A2 Stereo	ST
A2 Bilingual	BIL.
Regular Monaural	(none)
NICAM Stereo	ST NICAM
NICAM Bilingual	BIL. NICAM
NICAM Monaural	NICAM

- To listen to a stereo programme, press **AUDIO** until "HIFI L R" appears on the TV screen.
- To listen to a bilingual programme, press **AUDIO** until "HIFI L B" or "HIFI B R" appears on the TV screen.
- To listen to the standard (Regular Monaural) audio while receiving a NICAM broadcast, press **AUDIO** until "NORM" appears on the TV screen.

NOTE:

"O.S.D." must be set to "ON", or the on-screen displays will not appear. (➤ pg. 80)

To Record Stereo and Bilingual Programmes (A2)

Stereo programmes are automatically recorded in stereo on the Hi-Fi audio track (with the normal audio track recording mixed L and R channel sound).

- Bilingual programmes are automatically recorded in bilingual on the Hi-Fi audio track. The main soundtrack will be recorded on the normal audio track.

To Record NICAM Stereo and Bilingual Programmes

The NICAM audio programme will be recorded on the Hi-Fi audio track, and the standard audio programme will be recorded on the normal audio track.

NOTES:

- If the quality of stereo sound being received is poor, the broadcast will be received in monaural with better quality.
- Before playing back a programme recorded in stereo, or a bilingual programme, refer to "Soundtrack Selection" on page 51.

B.E.S.T. Picture System

The B.E.S.T. (Biconditional Equalised Signal Tracking) system checks the condition of the tape in use during playback and recording, and compensates to provide the highest-possible playback and recording pictures. You can set "B.E.S.T." to "ON" or "OFF" to your preference. (➤ pg. 53)

Playback

The unit assesses the quality of the tape once you initiate playback.

- The unit adjusts the playback picture quality based on the quality of the tape in use.
- B.E.S.T. is active during automatic tracking. "BEST" appears blinking on the front display panel.
- "BEST" only appears at the beginning of automatic tracking. Even though it doesn't appear after that, the B.E.S.T. function is operative.

Recording

The unit assesses the quality of the tape once you initiate recording.

- The unit spends approximately 7 seconds assessing the condition of the tape, then begins recording.

ATTENTION:

Since the B.E.S.T. system works before recording actually starts, there is a delay of approximately 7 seconds after ● and ► on the remote control are pressed, or ● on the unit is pressed. To make sure you record the desired scene or programme in its entirety, first perform the following steps:

- 1** Press and hold **II** and press ● to engage the Record Pause mode.

- The unit then automatically checks the condition of the tape and, after approximately 7 seconds, re-enters Record Pause mode.

- 2** Press ► to start recording.

If you want to bypass the B.E.S.T. system and begin recording immediately, set "B.E.S.T." to "OFF". (➤ pg. 53)

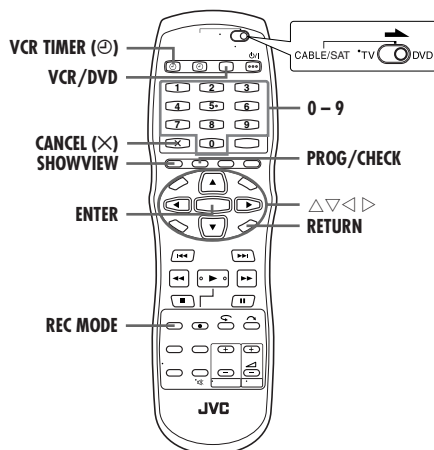
SHOWVIEW™ Timer Programming

You can programme this unit to timer-record as many as 8 programmes.

With the SHOWVIEW system, timer programming is greatly simplified because each TV programme has a corresponding code number which your unit is able to recognise.

You can use the remote control to enter the SHOWVIEW number.

- Make sure that the unit's built-in clock is set properly.
- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



- 1 Load a cassette with the record safety tab intact.
- 2 Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.

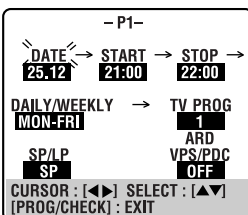
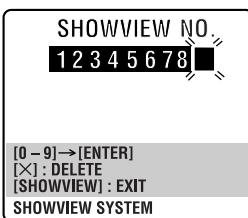
- 3 Press **SHOWVIEW** to access the SHOWVIEW screen.

- 4 Press the **number keys** to enter the SHOWVIEW number of a programme you wish to record, then press **ENTER**.

- If you have made a mistake, press **CANCEL (X)** and input the correct number before you press **ENTER**.
- If the number you entered is invalid, "ERROR" appears on the TV screen and "Err" appears on the front display panel. Press **CANCEL (X)** and input a valid SHOWVIEW number.

- 5 The SHOWVIEW number you entered and the matching timer-recording information are displayed on the TV screen. Check the programme data.

- To cancel this setting, press **SHOWVIEW** or **PROG/CHECK**.



- 6 Press **REC MODE** to select the desired recording mode. Or press **◀▶** to select "SP/EP", then press **△▽** to select the desired recording mode.

- 7 Press the number keys to set "VPS/PDC" to "ON" or "OFF".

- 8 Press **ENTER** to complete timer programming.

- To programme another timer, repeat steps 3 – 8.
- If "PROGRAM OVERLAP" appears on the TV screen, see page 56.

- 9 Press **VCR TIMER (Ⓢ)** to engage the unit's timer mode. The VCR timer lamp lights up on the unit and the DVD deck is automatically selected. Press **Ⓢ/1** to turn off the unit. When the DVD deck is in timer standby mode, the unit is automatically turned off.

- To disengage the timer mode, press **VCR TIMER (Ⓢ)** again.

IMPORTANT:

If you have moved to a different area or if a broadcasting station's programme number has been changed, the wrong programme number will be displayed on the SHOWVIEW programme screen in step 5. When this happens, set the correct Guide Program number for that station. (➡ pg. 82, "SHOWVIEW™ System Setup")

NOTES:

- To Timer-Record Weekly Or Daily Serials:
— in step 5, press **number key "9"** for weekly serials or **number key "8"** for daily serials (Monday — Friday). Either "WEEKLY" or "DAILY" appears on the TV screen. Pressing the button again makes the corresponding indication disappear.
- You can programme this unit to timer-record as many as 8 programmes. If you try to programme the unit to record a ninth, "PROGRAMME FULL" appears on the TV screen and "FULL" appears on the front display panel. To record the extra programme, you must first cancel any unnecessary programmes. (➡ pg. 56)
- To record the programmes received by satellite receiver, record on the DVD discs. For details, refer to "SHOWVIEW™ Timer Programming" (➡ pg. 43).

IMPORTANT:

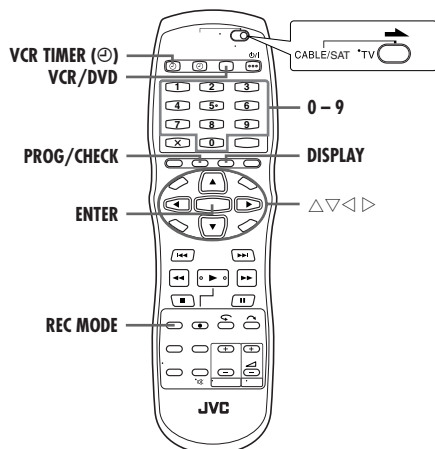
Make sure the channel position number you wish to record is displayed; if not, see "SHOWVIEW™ System Setup" (➡ pg. 82) and set the Guide Program number correctly.

Manual Timer Programming

You can programme this unit to timer-record as many as 8 programmes.

If you do not know the SHOWVIEW number for the programme you wish to record, use the following procedure to set your unit to timer-record the programme.

- Make sure that the unit's built-in clock is set properly.
- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



- 1 Load a cassette with the record safety tab intact.
- 2 Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.
- 3 Press **PROG/CHECK** to access the Programme Check screen.

	DATE	START	STOP	CH
1	24.12	8:00	10:00	3
2	25.12	10:00	10:45	2
3	25.12	11:30	13:00	1
4				
5				
6				
7				
8				

[▲▼] → [ENTER]
[PROG/CHECK] : EXIT

- 4 Press $\Delta\nabla$ to select the blank number, then press **ENTER**. The programme screen appears.

- 5 Press $\triangleleft\rangle$ to select "START", then press $\Delta\nabla$ to set the desired start time.

- Each press of $\Delta\nabla$ advances/goes back the start time in 1-min. increments.
- To advance/go back the start time in 30-min. increments, press and hold $\Delta\nabla$.

- 6 Press $\triangleleft\rangle$ to select "STOP", then press $\Delta\nabla$ to set the desired stop time.

- Each press of $\Delta\nabla$ advances/goes back the stop time in 1-min. increments.
- To advance/go back the stop time in 30-min. increments, press and hold $\Delta\nabla$.

- 7 Press $\triangleleft\rangle$ to select "DATE", then press $\Delta\nabla$ to set the desired date.

- The current date appears on the TV screen. The date you enter appears in its place.

- 8 Press $\triangleleft\rangle$ to select "TV PROG", then press $\Delta\nabla$ to select the desired channel.

- P1 -			
DATE	START	STOP	
25.12	21:00	22:00	
DAILY/WEEKLY	→ TV PROG		
MON-FRI	1		
SP/LP	ARD		
SP	VPS/PDC		
		OFF	
CURSOR : [◀] [▶] SELECT : [▲] [▼]			
CONFIRM : [ENTER]			

- 9 Press **REC MODE** to select the desired recording mode. Or press $\triangleleft\rangle$ to select "SP/EP", then press $\Delta\nabla$ to select the desired recording mode.

- 10 Press **ENTER** to access the Programme Check screen.

- 11 Press **PROG/CHECK** to complete timer programming. "PROGRAM COMPLETED" appears on the TV screen for about 5 seconds, then the normal screen appears. If "PROGRAM OVERLAP" appears on the TV screen, see page 56.

- To programme another timer, repeat steps 3 – 11.

- 12 Press **VCR TIMER** (⊙) to engage the unit's timer mode. The VCR timer lamp lights up on the unit and the DVD deck is automatically selected. Press $\phi/1$ to turn off the unit. When the DVD deck is in timer standby mode, the unit is automatically turned off.

- To disengage the timer mode, press **VCR TIMER** (⊙) again.

NOTES:

• To Timer-Record Weekly Or Daily Serials:

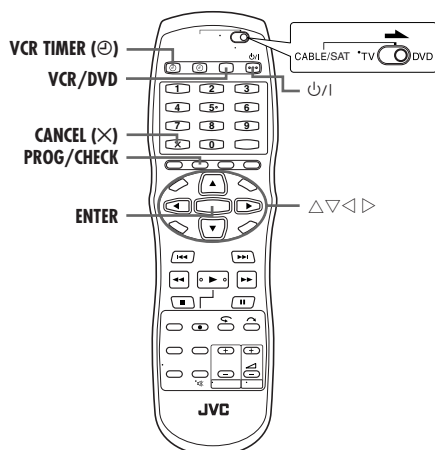
- anytime during steps 7 through 9, press **number key "9"** for weekly serials or **number key "8"** for daily serials (Monday – Friday). Either "WEEKLY" or "DAILY" appears on the TV screen. Pressing the button again makes the corresponding indication disappear.
- You can programme this unit to timer-record as many as 8 programmes. If you try to programme the unit to record a ninth, "PROGRAMME FULL" appears on the TV screen. To record the extra programme, you must first cancel any unnecessary programmes. (pg. 56)
- In case of a power failure after programming, the unit's memory backup keeps your selections for approximately 5 seconds.
- Programmes that start after midnight must have the next day's date.
- To record the programmes received by satellite receiver, record on the DVD discs. For details, refer to "Manual Timer Programming" (pg. 44).

VPS/PDC Recording

Now available from some TV stations, PDC (Programme Delivery Control) and VPS (Video Programme System) are services designed to assure safe, accurate timer recording. With this system, special code signals are transmitted together with the audio/video signals. These code signals control your video unit and have precedence over the advertised times you may have preset into the timer. This means that your unit will start and stop recording when the preset TV programmes actually start and end — even if the broadcast time of a preset TV programme is changed.

NOTES:

- When you use Manual Timer Programming, set the start time (VPS or PDC time) exactly as advertised in the TV listing. A different time than advertised will result in no recording.
- VPS/PDC recording is not possible when a satellite receiver or a cable system is connected to L-2 IN/DECODER connector on your unit.
- VPS/PDC recording is also possible via the L-1 IN/OUT connector.



Check, cancel and change programmes

1 When the VCR timer lamp lights on the unit
Press **VCR TIMER** (⊙), then press **⏻**.

When the VCR lamp does not light up on the unit
Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.

2 Press **PROG/CHECK** to access the Programme Check screen.

To cancel a programme
Press **CANCEL** (X) to cancel a programme.

3 Press **Δ∇** to select the programme, then press **ENTER**. The programme screen appears.

4 Change the settings of the desired recording options as required.
• Refer to steps 7 – 10 in "Manual Timer Programming" (pg. 55).

5 Press **PROG/CHECK** to complete timer correction. The previous screen resumes.

6 Press **VCR TIMER** (⊙).

- The VCR timer lamp lights up on the unit and the DVD deck is automatically selected. When the DVD deck is in timer standby mode, the unit is automatically turned off.

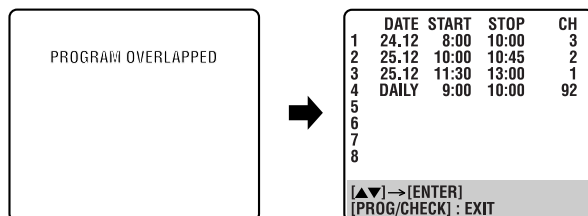
	DATE	START	STOP	CH
1	24.12	8:00	10:00	3
2	25.12	10:00	10:45	2
3	25.12	11:30	13:00	1
4				
5				
6				
7				
8				

[▲▼] → [ENTER]
[PROG/CHECK] : EXIT

- P1 -			
DATE →	START →	STOP →	
25.12	21:00	22:00	
DAILY/WEEKLY →	TV PROG		
MON-FRI	1		
SP/LP	ARD		
SP	VPS/PDC		
	OFF		
CURSOR : [◀▶] SELECT : [▲▼]			
CONFIRM : [ENTER]			

When Programmes Overlap Each Other

If "PROGRAM OVERLAP" appears, you have another programme overlapping the programme you have just made. The Programme Check screen appears and conflicting programmes will start blinking.



Example: Programme 1 (you have just made) and Programme 4 overlap each other.

1 Confirm the overlapping programmes. Overlapping programmes blink on the TV screen.

2 Press **Δ∇** to select the programme to modify, then press **ENTER** or **▶**.

- You can only select one of the overlapping programmes.

NOTE:

If you do not mind this overlap, press **PROG/CHECK** to finish the timer programme setting. The programme with the lower programme number will be recorded and the other one will not be recorded correctly. If no changes are made for approximately 1 minute, the unit will return to the normal screen.

3 Press **Δ∇** to select the desired programme to be cancelled or changed.

To cancel the programme

Press **CANCEL** (X).

- "PROGRAM COMPLETED" appears on the TV screen for about 5 seconds, then the normal screen resumes.

To change the programme setting

Press **ENTER**, then go to step 4.

4 Change the programme setting.

- Refer to steps 7 – 10 in "Manual Timer Programming" (pg. 55).

5 Press **PROG/CHECK** to check if the conflict has been settled. Programme check screen appears.

- "PROGRAM COMPLETED" appears on the TV screen for about 5 seconds, then the normal screen resumes.

6 Press **VCR TIMER** (⊙).

NOTE:

When any overlaps remain after deletion and modification of programmes, Programme Check screen remains showing the conflicting programmes. In such a case, repeat the procedure above until the conflict is solved.

Library Database DVD Navi



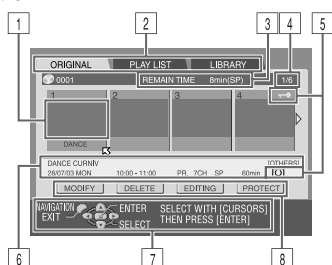
The Library Database DVD Navi enables you to search and select the desired programmes recorded on a DVD-RAM/R/RW disc very easily.

You can record up to 99 programmes on a disc.

Each time a programme is recorded on the disc, the information of the programme is registered for the Library Database DVD Navi automatically.

So, you can confirm the information of the programmes recorded on the disc with the Library Database DVD Navi screen. And, you can also select one of the programmes recorded on the disc using the Library Database DVD Navi.

The following screen appears as the Library Database DVD Navi screen when you press **NAVIGATION**. You can move the arrow to select the desired position on the screen by pressing $\triangle \nabla \triangleleft \triangleright$ on the remote control.



- 1 Index
(Small still picture of each programme)
- 2 Names of functions
ORIGINAL (pg. 58)
PLAY LIST (pg. 60)
LIBRARY (pg. 63)
- 3 Remaining time
(Based on the recording mode currently selected)
- 4 Current/Total number of programme(s)
(For example, there are 6 recorded programmes and the programme indicated by the arrow is the 3rd one.)
- 5 Icons
(Indicate the recording situation for each programme.)
- 6 Recording information for the programme indicated by the arrow
- 7 Guidance for operations
- 8 Operational commands

The Icons and their meanings

	This programme is write-protected.
	This programme has stereo sounds.
	This programme has bilingual sounds.
	This programme was recorded with timer recording.

Using Library Database DVD Navi system, you can easily modify registered information, edit the programme or play list, as well as search for the beginning of each programme.

About registration of information

The following information is automatically registered for each programme when ordinary recording or timer recording is performed, then stored in an area specified on the unit.

- index* (reduced still pictures to show programme titles)
- programme title*
- category*
- date and time
- channel
- recording mode
- length of recording time

The items marked with an asterisk (*) can be easily modified and registered again after recording by using Library Database DVD Navi system.

About editing of programmes

Library Database DVD Navi system has the following functions for editing of programmes.

- "Modify Play List Information" (pg. 60)
- "Delete Programme" (pg. 59)

The limitations of registration

You can register information up to 99 programmes.

When the amount of information is at the limits of registration, you cannot record new programme any more. In this case, you need to delete old programmes to register new one. (pg. 59)

NOTE:

Once a DVD-R/RW (Video mode) disc has been finalised, the displays for original and play list do not appear. Only display for library appears.

The display for original recording

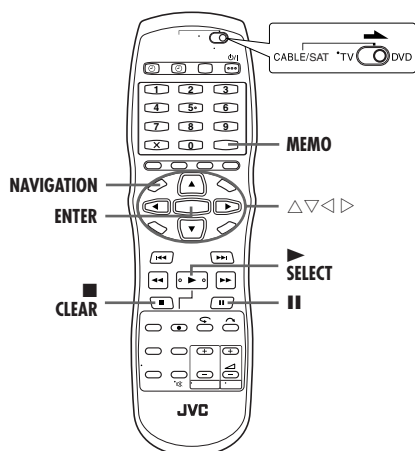


The display for play list



Scan For Beginning(s) Of Programme(s)

- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



You can scan the beginning of the programme easily with the Library Database DVD Navi.

- 1 Load a recorded disc.
- 2 Press **NAVIGATION**. The Library Database DVD Navi screen appears.
- 3 Press $\Delta \nabla \triangleleft \triangleright$ to select "ORIGINAL", then press **ENTER**.

- 4 Press $\triangleleft \triangleright$ to select the index (small still pictures) of the desired programme.

- When you want the plural programmes to be played back continuously, press **MEMO** after selecting the desired programme. The numbers of the playback order appear on the index. You can select up to 30 programmes.

- When you want to correct the order, move the arrow to the desired index and press **MEMO**. The number disappears and the unit re-numbers the other programmes automatically.

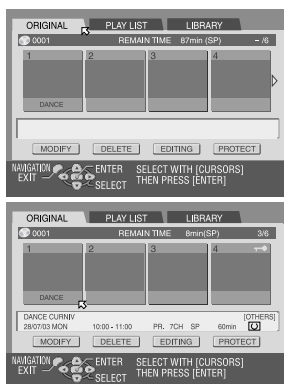
- When you want to cancel the order, press **CLEAR** (■).

- 5 Press **ENTER** or **SELECT** (▶) to start playback. The playback starts.

- 6 Press **II** to pause playback.

- To resume normal playback, press ▶.

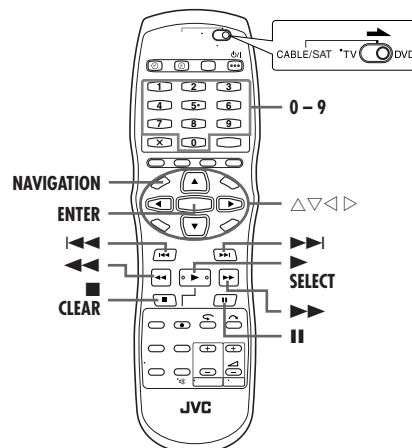
- 7 Press ■ to stop playback.



Modify Original Information



- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



Modify Index

- 1 Press **NAVIGATION**. The Library Database DVD Navi screen appears.
- 2 Press $\Delta \nabla \triangleleft \triangleright$ to select "ORIGINAL", then press **ENTER**.
- 3 Press $\Delta \nabla \triangleleft \triangleright$ to select one programme you want to modify, then press ∇ .

- 4 Press $\Delta \nabla \triangleleft \triangleright$ to select "MODIFY", then press **ENTER**.

- 5 Press $\triangleleft \triangleright$ to select "MODIFY INDEX".

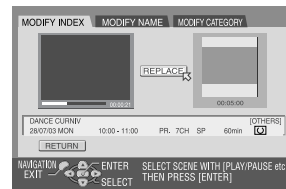
- 6 Search for the picture from the programme by pressing the appropriate buttons ($\triangleleft \triangleright$, \gg , or **II**). The pictures of the programme appear on the left window.

- 7 Confirm the arrow is on "REPLACE", then press **ENTER** to register new index. New index appears on the right window.

- When you press **ENTER** with the arrow on "RETURN" you can return to the previous screen.

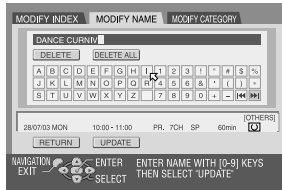
- 8 Press **NAVIGATION** to return to the normal screen.

- Press ■ to cancel pause mode after pressing **NAVIGATION**.



Modify Programme Name

- 1 Perform steps 1 to 3 of “Modify Index” (pg. 58) before continuing.
- 2 Press $\Delta \nabla \triangleleft \triangleright$ to select “MODIFY”, then press **ENTER**.
- 3 Press $\triangleleft \triangleright$ to select “MODIFY NAME”.
- 4 Press $\Delta \nabla \triangleleft \triangleright$ to select the desired letter or command, then press **ENTER**. Repeat this process to complete the name.
 - To correct a letter, press $\Delta \nabla \triangleleft \triangleright$ to select “DELETE” or “DELETE ALL”, then press **ENTER**.
 - You can enter the letters up to 64.
 - You can also enter the new name with the **number keys**. For example, when you press **2** repeatedly, “A”, “B”, “C”, “a”, “b”, “c”, “2”, and then “A” appear by turns. You can use the following buttons.

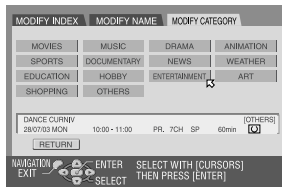


Number keys: for entering letters, numbers and blank space
 $\triangleleft \triangleright$ **buttons:** for moving the entering or inserting point
CLEAR (■) **button:** for correcting a letter
 $\triangleleft \triangleleft \triangleright \triangleright$ **buttons:** for changing character tables

- 5 Press $\Delta \nabla \triangleleft \triangleright$ to select “SAVE”, then press **ENTER**.
- 6 Press $\Delta \nabla \triangleleft \triangleright$ to select “RETURN”, then press **ENTER**. The Library Database DVD Navi screen appears again.
- 7 Press **NAVIGATION** to return to the normal screen.

Modify Category

- 1 Perform steps 1 to 3 of “Modify Index” (pg. 58) before continuing.
- 2 Press $\Delta \nabla \triangleleft \triangleright$ to select “MODIFY”, then press **ENTER**.
- 3 Press $\triangleleft \triangleright$ to select “MODIFY CATEGORY”.
- 4 Press $\Delta \nabla \triangleleft \triangleright$ to select the desired category, then press **ENTER**.
- 5 Press **ENTER**. The Library Database DVD Navi screen appears again.
- 6 Press **NAVIGATION** to return to the normal screen.



Protect Title

You can protect the programme to prevent accidental erasure of the important programme.

- 1 Perform steps 1 to 2 of “Modify Index” (pg. 58) before continuing.
- 2 Press $\Delta \nabla \triangleleft \triangleright$ to select a programme you want to protect, then press ∇ .
- 3 Press $\triangleleft \triangleright$ to select “PROTECT”, then press **ENTER**. “” appears.
 - To cancel the protection, repeat 2 – 3 again.
- 4 Press **NAVIGATION** to return to the normal screen.

NOTE:

All the programmes on a disc will be deleted once the disc is formatted even if they are protected titles. (pg. 59)

Delete Programme

You cannot record any more with Library Database DVD Navi once the registered programmes on the disc reach 99 programmes. Deleting unnecessary programmes after dubbing or other operations can increase remaining time and available recording capacity. (For DVD-R discs, although it is possible to delete recorded programmes, available recording capacity does not increase.) The deleted programme is never resumed. Play lists and programme information in the unit's library are also deleted.

- 1 Perform steps 1 to 2 of “Modify Index” (pg. 58) before continuing.
- 2 Press $\Delta \nabla \triangleleft \triangleright$ to select one programme you want to delete, then press ∇ .
- 3 Press $\Delta \nabla \triangleleft \triangleright$ to select “DELETE”, then press **ENTER**. The message appears for your confirmation.
- 4 Press $\triangleleft \triangleright$ to select “YES”, then press **ENTER**.
 - When you cancel the deletion, select “NO”, then press **ENTER**.
- 5 Press **NAVIGATION** to return to the normal screen.

Delete Unwanted Part Of The Programme

You can delete unwanted part of the programme.

- 1 Perform steps 1 to 2 of “Modify Index” (pg. 58) before continuing.
- 2 Press $\triangleleft \triangleright$ to select one programme whose unwanted part you want to delete, then press ∇ .
- 3 Press $\triangleleft \triangleright$ to select “EDITING”, then press **ENTER**.
- 4 Press \blacktriangleright to start playback. The playback pictures appear in the window on the screen. The elapsed playing time starts counting with the arrow on “IN”.
- 5 Find the point where you want the deletion to begin, then press **ENTER** with the arrow on “IN”. The edit-in time is fixed and the elapsed playing time starts counting again.
- 6 Find the point where you want the deletion to end, then press **ENTER** with the arrow on “OUT”. The edit-out time is fixed.
 - Press \lll, \ggg, \lll, \ggg or \parallel to find the edit-in and edit-out points.
- 7 Press $\triangle \nabla \triangleleft \triangleright$ to select “PREVIEW”, then press **ENTER** to preview the edited programme.
- 8 Press $\triangle \nabla \triangleleft \triangleright$ to select “EXECUTE”, then press **ENTER**.
 - If you do not want to delete the scene, select “CLEAR” and press **ENTER**.
- 9 Press $\triangleleft \triangleright$ to select “YES”, then press **ENTER**. The selected scene is deleted.
 - To cancel the deletion, press $\triangleleft \triangleright$ to select “NO”, then press **ENTER**.

To modify the points

- 1 Press $\triangleleft \triangleright$ to select "CLEAR", then press **ENTER**.
- 2 Repeat steps 4 – 9 as necessary.

- 10** Press **NAVIGATION** to return to the normal screen.

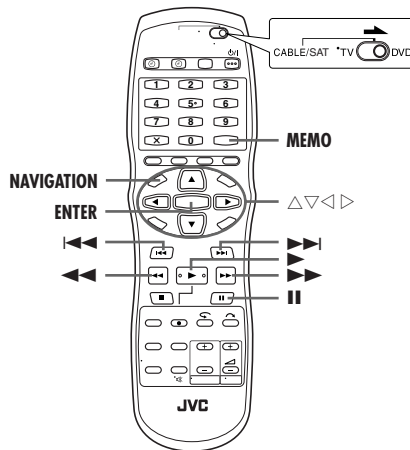
NOTES:

- There may be a discrepancy of several seconds between the scene you intend to edit, and the scene which is actually edited.
- Available recording capacity may not match the deleted part after deletion.

Modify Play List Information



- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.

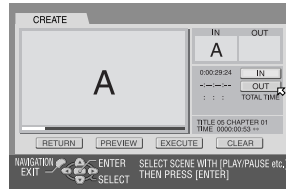


Play List

It is a collection of the scenes. A play list can be freely edited and played back without ever changing any original recording data. Using the random access of a DVD disc (which allows video data to be instantly read no matter where it is on the disc), a play list includes information such as the timer counter for the playback start point and end point, indexes for checking the contents of recorded data, category information, and more. Playback according to a play list you have created allows you to enjoy various combinations of video images from a single programme.

Create Play List

- 1 Load a DVD-RAM or DVD-RW (VR mode) disc that was recorded with this unit.
- 2 Press **NAVIGATION**. The Library Database DVD Navi screen appears.
- 3 Press $\triangle \nabla \triangleleft \triangleright$ to select "PLAY LIST", then press ∇ or **ENTER**.
- 4 Press $\triangle \nabla \triangleleft \triangleright$ to select "CREATE", then press **ENTER**.
- 5 Press \blacktriangleright to start playback. The playback pictures appear in the window on the screen. The elapsed playing time starts counting with the arrow on "IN".
 - To locate the beginning of other titles, press $\blacktriangleleft \blacktriangleleft \blacktriangleright \blacktriangleright \blacktriangleright \blacktriangleright$.
- 6 Find the point where you want the created play list to begin, then press **ENTER** with the arrow on "IN". The edit-in time is fixed and the elapsed playing time starts counting again.
- 7 Find the point where you want the created play list to end, then press **ENTER** with the arrow on "OUT". The edit-out time is fixed.
 - Press $\blacktriangleleft \blacktriangleleft, \blacktriangleright, \blacktriangleright \blacktriangleright, \blacktriangleleft \blacktriangleleft, \blacktriangleright \blacktriangleright$ or \parallel to find the edit-in and edit-out points.
 - The edit-out point must come after the edit-in point.



8 Press $\triangleleft \triangleright$ to select "PREVIEW", then press **ENTER** to preview the play list.

9 Press $\triangleleft \triangleright$ to select "EXECUTE", then press **ENTER**. The play list is created.

To modify the points

1 Press $\triangleleft \triangleright$ to select "CLEAR", then press **ENTER**.

2 Repeat steps 5 – 9 as necessary.

10 Press **NAVIGATION** to return to the normal screen.

NOTES:

- There may be a discrepancy of several seconds between the scene you intend to edit, and the scene which is actually edited.
- The title, index and category of the play list can be modified in the same way as "ORIGINAL". (pg. 58)
- You can modify the play list that has just been created here by adding, moving, or deleting unwanted parts to create a digest edition, etc.

Add Scenes To A Play List

1 Perform steps 1 to 3 of "Create Play List" (pg. 60) before continuing.

2 Press $\triangleleft \triangleright$ to select the play list to which you wish to add a scene, then press ∇ .

3 Press $\triangleleft \triangleright$ to select "EDITING", then press **ENTER**.

4 Press $\triangleleft \triangleright$ to select "ADD SCENE".

5 Press \triangleright to start playback. The playback pictures appear in the window on the screen. The elapsed playing time starts counting with the arrow on "IN".

- To locate the beginning of other titles, press $\triangleleft \triangleleft / \triangleright \triangleright$.

6 Find the point where you want the added scene to begin, then press **ENTER** with the arrow on "IN". The edit-in time is fixed and the elapsed playing time starts counting again.

7 Find the point where you want the added scene to end, then press **ENTER** with the arrow on "OUT". The edit-out time is fixed.

- Press $\triangleleft \triangleleft, \triangleright \triangleright, \triangleleft \triangleleft, \triangleright \triangleright$ or \parallel to find the edit-in and edit-out points.

8 Press $\triangleleft \triangleright$ to select "PREVIEW", then press **ENTER** to preview approximately 5 seconds before and after the edited scene.

9 Press $\triangleleft \triangleright$ to select "EXECUTE", then press **ENTER**. The selected scene is added.

To modify the points

1 Press $\triangleleft \triangleright$ to select "CLEAR", then press **ENTER**.

2 Repeat steps 5 – 8 as necessary.

10 Press **NAVIGATION** to return to the normal screen.

NOTE:

There may be a discrepancy of several seconds between the scene you intend to edit, and the scene which is actually edited.

Move Scenes

1 Perform steps 1 to 3 of "Create Play List" (pg. 60) before continuing.

2 Press $\triangleleft \triangleright$ to select a play list into which you wish to move a scene, then press ∇ .

3 Press $\triangleleft \triangleright$ to select "EDITING", then press **ENTER**.

4 Press $\triangleleft \triangleright$ to select "MOVE SCENE".

5 Press \triangleright to start playback. The playback pictures appear in the window on the screen. The elapsed playing time starts counting with the arrow on "IN".

- To locate the beginning of other titles, press $\triangleleft \triangleleft / \triangleright \triangleright$.

6 Find the point where you want the moved scene to begin, then press **ENTER** with the arrow on "IN". The edit-in time is fixed and the elapsed playing time starts counting again.

7 Find the point where you want the moved scene to end, then press **ENTER** with the arrow on "OUT". The edit-out time is fixed.

8 Press \triangleright to start playback.

9 Find the point where you want the moved scene to be moved, then press **ENTER** with the arrow on "MOVE TO".

- Press $\triangleleft \triangleleft, \triangleright \triangleright, \triangleleft \triangleleft, \triangleright \triangleright$ or \parallel to find the edit-in, edit-out and move-to points.

10 Press $\triangleleft \triangleright$ to select "PREVIEW", then press **ENTER** to preview the part approximately 5 seconds before and after the point to which the scene has been moved.

11 Press $\triangleleft \triangleright$ to select "EXECUTE", then press **ENTER**. The selected scene is moved.

To modify the points

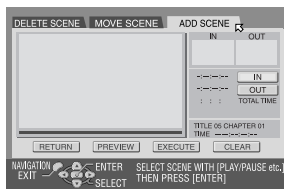
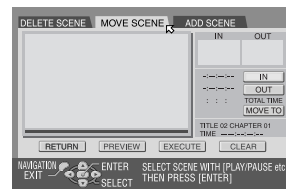
1 Press $\triangleleft \triangleright$ to select "CLEAR", then press **ENTER**.

2 Repeat steps 5 – 11 as necessary.

12 Press **NAVIGATION** to return to the normal screen.

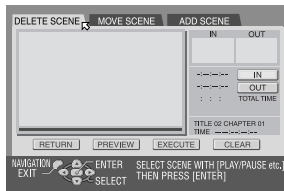
NOTE:

There may be a discrepancy of several seconds between the scene you intend to edit, and the scene which is actually edited.



Delete Unwanted Part From Play List

- 1 Perform steps 1 to 3 of "Create Play List" (pg. 60) before continuing.
- 2 Press $\triangleleft \triangleright$ to select a play list from which you wish to delete unwanted parts, then press ∇ .
- 3 Press $\triangleleft \triangleright$ to select "EDITING", then press **ENTER**.
- 4 Press $\triangleleft \triangleright$ to select "DELETE SCENE", then press **ENTER**.
- 5 Press \blacktriangleright to start playback. The playback pictures appear in the window on the screen. The elapsed playing time starts counting with the arrow on "IN".
 - To locate the beginning of other titles, press $\mathbf{I} \ll \triangleright \gg \mathbf{I}$.



- 6 Find the point where you want the deletion to begin, then press **ENTER** with the arrow on "IN". The edit-in time is fixed and the elapsed playing time starts counting again.
- 7 Find the point where you want the deletion to end, then press **ENTER** with the arrow on "OUT". The edit-out time is fixed.
 - Press $\mathbf{I} \ll, \triangleright, \gg, \mathbf{I} \ll, \gg \mathbf{I}$ or **II** to find the edit-in and edit-out points.
- 8 Press $\triangleleft \triangleright$ to select "PREVIEW", then press **ENTER** to preview the scene approximately 5 seconds before and after the deleted part.
- 9 Press $\triangleleft \triangleright$ to select "EXECUTE", then press **ENTER**. The selected scene is deleted.

To modify the points

- 1 Press $\triangleleft \triangleright$ to select "CLEAR", then press **ENTER**.
- 2 Repeat steps 5 – 9.

- 10 Press **NAVIGATION** to return to the normal screen.

NOTE:

There may be a discrepancy of several seconds between the scene you intend to edit, and the scene which is actually edited.

Play Back Play List

- 1 Perform steps 1 to 3 of "Create Play List" (pg. 60) before continuing.
- 2 Press $\triangleleft \triangleright$ to select the index (small still pictures) of the desired play list.
 - When you want the plural play lists to be played back continuously, press **MEMO** after selecting the desired play lists. The numbers of the playback order appear on the index. You can select up to 30 play lists.
 - When you want to correct the order, move the arrow on the desired index and press **MEMO**. The number disappears and the unit re-numbers the other play lists automatically.
 - When you want to cancel the order, press **CLEAR** (■).
- 3 Press **ENTER** or **SELECT** (\blacktriangleright) to start playback. The playback starts.
- 4 Press **II** to pause playback.
 - To resume normal playback, press \blacktriangleright .
- 5 Press **■** to stop playback.



Delete Play List

- 1 Perform steps 1 to 3 of "Create Play List" (pg. 60) before continuing.
- 2 Press $\triangleleft \triangleright$ to select one play list you want to delete, then press ∇ .
- 3 Press $\triangleleft \triangleright$ to select "DELETE", then press **ENTER**.
- 4 Press $\triangleleft \triangleright$ to select "YES", then press **ENTER**.
 - When you cancel the deletion, select "NO", then press **ENTER**.
- 5 Press **NAVIGATION** to return to the normal screen.

NOTE:

Even if a play list is deleted, the programmes recorded on a DVD disc and the library information are not affected at all.

Modify Index

- 1 Perform steps 1 to 3 of "Create Play List" (pg. 60) before continuing.
- 2 Perform steps 3 to 8 of "Modify Index" (pg. 58).

Modify Programme Name

- 1 Perform steps 1 to 3 of "Create Play List" (pg. 60) before continuing.
- 2 Press $\triangle \nabla \triangleleft \triangleright$ to select one programme you want to modify, then press ∇ .
- 3 Perform steps 2 to 7 of "Modify Programme Name" (pg. 59).

Modify Category

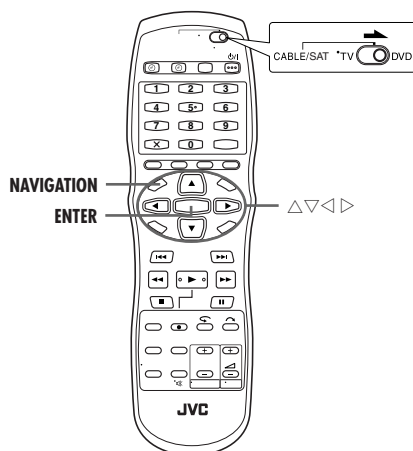
- 1 Perform steps 1 to 3 of "Create Play List" (pg. 60) before continuing.
- 2 Press $\triangle \nabla \triangleleft \triangleright$ to select one programme you want to modify, then press ∇ .
- 3 Perform steps 2 to 6 of "Modify Category" (pg. 59).

Modify Library Information



Programme information can be registered in the unit's memory for up to 1,300 programmes. It is helpful when finding out on which disc the desired programme is recorded.

- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



Scan For Programme From Library

1 Press **NAVIGATION**. The Library Database DVD Navi screen appears.

2 Press $\triangle \nabla \triangleleft \triangleright$ to select "LIBRARY", then press **ENTER**.

3 Press $\triangle \nabla \triangleleft \triangleright$ to select the appropriate sort button to sort the information, then press **ENTER**.

"DISC No." : Sort by disc number

"CATEGORY" : Sort by category

"DATE" : Sort by date

"NAME" : Sort by name

- The sorting order can be switched between ascending order and descending order by pressing the sort buttons.

4 Press $\triangleleft \triangleright$ to select the desired programme, then press **ENTER**.

- Playback begins automatically after the selected programme is located.

When the disc that contains the selected programme is not loaded

A screen prompting you to load the designated disc appears. Place the disc whose number is displayed on the screen after pressing **ENTER** to close the prompt screen. Then perform steps **1** to **4**.

NOTE:

If a disc registered in the library is recorded or modified on DVD units from other manufacturers, it may become impossible to operate properly.

Register Disc

1 Load a disc you want to register.

2 Press **NAVIGATION**. The Library Database DVD Navi screen appears.

3 Press $\triangle \nabla \triangleleft \triangleright$ to select "LIBRARY", then press **ENTER**.

4 Press $\triangleleft \triangleright$ to select "REGISTER", then press **ENTER**.

5 Press $\triangleleft \triangleright$ to select "REGISTER", then press **ENTER** to confirm the registration.

6 Press **NAVIGATION** to return to the normal screen.

NOTES:

- It is not possible to register discs used for On-Disc Timer Programming. (pg. 45)
- It is not possible to register discs formatted on devices other than JVC's DVD recorders.
- It is not possible to register discs recorded on devices other than JVC's DVD recorders.
- It is not possible to register discs when "SAVE AS LIBRARY" is set to "OFF". (pg. 79)

Delete Information

1 Press **NAVIGATION**. The Library Database DVD Navi screen appears.

2 Press $\triangle \nabla \triangleleft \triangleright$ to select "LIBRARY", then press **ENTER**.

3 Press $\triangle \nabla \triangleleft \triangleright$ to select the appropriate sort button to sort the information, then press **ENTER**.

4 Press $\triangleleft \triangleright$ to select a programme you want to delete, then press ∇ .

5 Press $\triangle \nabla \triangleleft \triangleright$ to select "DELETE", then press **ENTER**.

6 Press $\triangleleft \triangleright$ to select "DELETE", then press **ENTER** to confirm the deletion.

7 Press **NAVIGATION** to return to the normal screen.



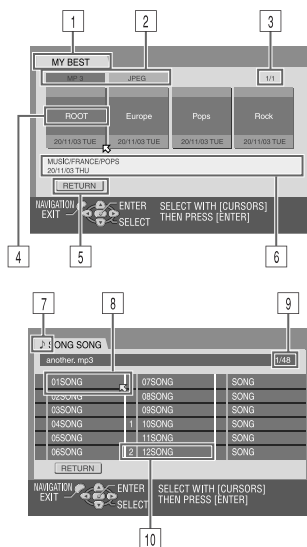
Playback With MP3/JPEG Navigation



This unit can play back discs that MP3 sound files and JPEG image files taken with digital still cameras or other devices are recorded.

The MP3/JPEG Navigation enables you to search and select the desired files recorded on CD-R/RW or CD-ROM discs very easily.

The following screen appears as the MP3/JPEG Navigation screen when you press **NAVIGATION**. You can move the arrow to select the desired position on the screen by pressing $\triangle \nabla \triangleleft \triangleright$ on the remote control.



- 1 Name of the inserted disc.
- 2 Sort buttons ("MP3"/"JPEG")
- 3 Selected group number/total number of groups on the disc
- 4 Group name
- 5 Return button ("RETURN")
- 6 Group name/Created date
- 7 File type indicator
 MP3 : MP3
 JPEG : JPEG
- 8 Selected file
- 9 Selected file number/total number of files in the group that contains the selected file
- 10 Programme number/file name

Locating The Desired Group And Tracks

- 1 Load a disc.
- 2 Press **NAVIGATION**. The MP3/JPEG Navigation screen appears.
- 3 **For MP3 Playback**
Press $\triangleleft \triangleright$ to select "MP3". Only groups which contain MP3 files appear.

For JPEG Playback

Press $\triangleleft \triangleright$ to select "JPEG". Only groups which contain JPEG files appear.

- 4 Press $\triangleleft \triangleright$ to select the desired group, then press **ENTER**.

For MP3 Playback

- The tracks in the selected group appear.

For JPEG Playback

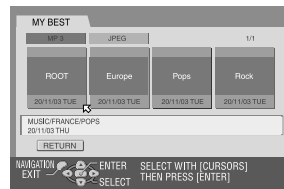
- The images in the selected group appear.

- 5 Press $\triangle \nabla \triangleleft \triangleright$ to select the desired item, then press **ENTER**. The unit starts playback from the selected item.

- The unit stops when all items in the selected group are played back.

NOTES:

- If you press **SELECT** (\blacktriangleright) instead of **ENTER** in step 4, the unit starts playback from the first file of the group.
- JPEG files are played back as a slide show at the set intervals. (pg. 38)
- If a file name includes any 2-byte character, the unit may not show the file name correctly.
- Press $\triangle \nabla$ to select "RETURN", then press **ENTER** to return to the screen that shows the group(s).
- The order of the groups and items shown in steps 4 and 5 may differ from the order shown on your PC.



Programme Playback

- 1 Perform steps 1 to 4 of "Locating The Desired Group And Tracks" in the left column before continuing.
- 2 Press $\triangle \nabla \triangleleft \triangleright$ to select the desired item, then press **MEMO** in the desired order.
 - The order number appears on the left of the track name.
 - Repeat this step as necessary.
 - To cancel the track, press $\triangle \nabla \triangleleft \triangleright$ to select the track, then press **CANCEL** (X).
 - Pressing **CLEAR** (■) clears all the order numbers.
- 3 Press \blacktriangleright to start playback.
 - To quit the Programme Playback, press ■.
 - Repeat playback can be performed if it is set as such on the on-screen bar. (pg. 34)

NOTES:

- It is not possible to select tracks and images simultaneously.
- It is not possible to select tracks or images in other groups.

On completion of the playback of all the items

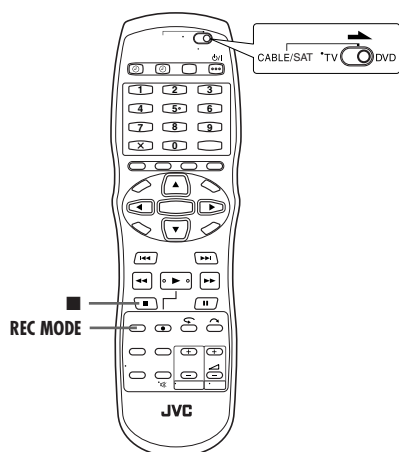
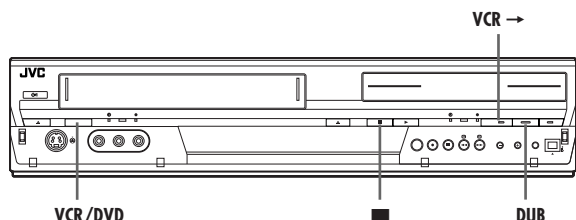
- 1 Perform steps 1 to 4 of "Locating The Desired Group And Tracks" in the left column.
- 2 Press **CLEAR** (■).
 - The order numbers are reset and cleared.
- 3 Press **NAVIGATION** to complete the procedure.

Tape Dubbing (From VCR To DVD)

Dubbing An Entire Cassette

Because this unit includes both DVD deck and VCR deck, you can easily use this unit for dubbing without connecting any other equipment.

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



1 For DVD deck

Load a recordable disc.

For VCR deck

Load a cassette you want to dub.

2 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.

3 Press **REC MODE** repeatedly to set the recording mode.

4 Press **VCR→** to select the dubbing direction.

• "VCR→" lights up on the unit.

5 Press and hold **DUB** for more than 2 seconds to start dubbing.

- If the tape has not been rewound, the VCR deck rewinds the tape automatically. When the VCR deck has finished rewinding, dubbing begins automatically.
- After dubbing is completed, the VCR deck rewinds the tape automatically and the unit shuts off.
- To stop dubbing, press ■.

NOTES:

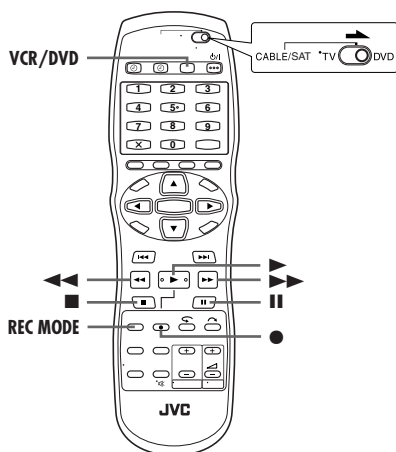
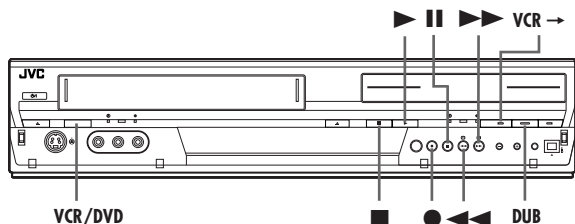
- If you set the dubbing direction incorrectly, you could erase an important recording that you wanted to dub. It is recommended to conduct a test with unimportant cassettes first.
- The superimposed indication during the operation or dubbing is not recorded.
- It is not possible to dub a tape with a copy protection signal.
- If the recording capacity of disc become full, the tape stops automatically.
- It is not possible to perform other operations like Live Memory Playback. Check the recorded programme on the disc after dubbing.
- Dubbing is not possible on the discs used exclusively for On-Disc Timer Programming.
- If the index code is found on a tape, a single title is created. While creating a title, the dubbing stops and then starts again.

Manual Dubbing (From VCR To DVD)

Dubbing A Part Of A Cassette

You can dub the selected scenes on a tape to the DVD disc, starting and stopping wherever you wish.

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



1 For DVD deck

Load a recordable disc.

For VCR deck

Load a cassette you want to dub.

2 Press **VCR→** to select the dubbing direction.

- "VCR→" lights up on the front display panel.

3 Prepare the VCR deck for dubbing.

1 Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.

2 Locate the point from where you want to start dubbing, then pause playback by pressing the following buttons: **▶**, **▶▶**, **◀◀**, **■**, **||**

4 Prepare the DVD deck for dubbing.

1 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.

2 Press **REC MODE** repeatedly to set the recording mode.

3 Press and hold **||**, then press **●** so that the DVD deck enters the Record Pause mode.

5 Press and hold **DUB** for more than 2 seconds to start dubbing.

6 Press **■** to stop recording on the DVD deck. Then press **VCR/DVD**, and press **■** to stop playback on the VCR deck.

NOTES:

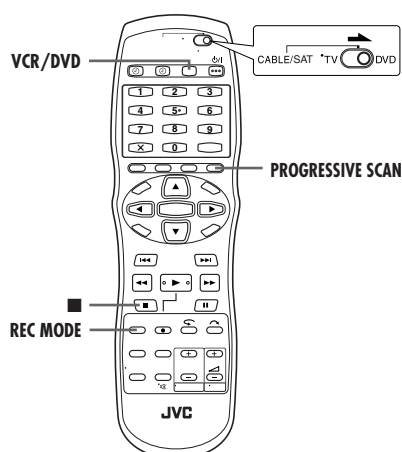
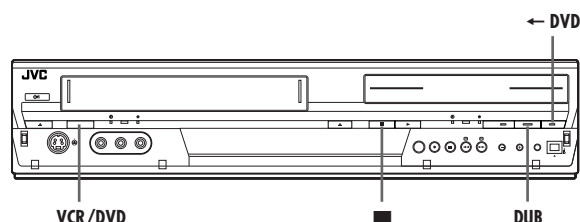
- If you set the dubbing direction incorrectly, you could erase an important recording that you wanted to dub. It is recommended to conduct a test with unimportant cassettes first.
- There may be a discrepancy of several seconds between where you intend dubbing to start, and where it actually starts.
- The superimposed indication during the operation or dubbing is not recorded.
- It is not possible to dub a tape with a copy protection signal.
- If the recording capacity of disc become full, the tape stops automatically.
- It is not possible to perform other operations like Live Memory Playback. Check the recorded programme on the disc after dubbing.
- Dubbing is not possible on the discs used exclusively for On-Disc Timer Programming.

Disc Dubbing (From DVD To VCR)

Dubbing An Entire Disc

Because this unit includes both DVD deck and VCR deck, you can easily use this unit for dubbing without connecting any other equipment.

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



1 For DVD deck

Load a disc you want to dub.

For VCR deck

Load a cassette with the record safety tab intact.

2 Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.

3 Press **REC MODE** repeatedly to set the recording mode.

4 Press **←DVD** to select the dubbing direction.

• "←DVD" lights up on the unit.

5 Press and hold **DUB** for more than 2 seconds to start the dubbing.

- If the tape has not been rewound, the VCR deck rewinds the tape automatically. When the VCR deck has finished rewinding, dubbing begins automatically.
- After dubbing is completed, the VCR deck rewinds the tape automatically and the unit shuts off.
- To stop dubbing, press ■.

NOTES:

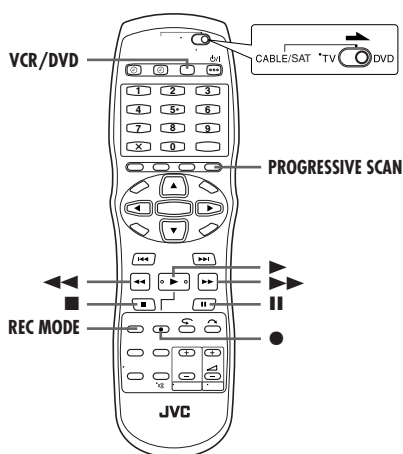
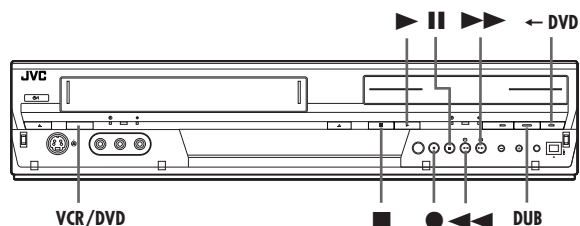
- It is not possible to start dubbing if the unit retains a memory of the resume points. Press ■ twice to clear the resume points.
- There may be a discrepancy of several seconds between where you intend dubbing to start, and where it actually starts.
- The superimposed indication during the operation or dubbing is not recorded.
- When the end of the tape is reached during dubbing, the tape is ejected and both deck stops.
- When the progressive mode is set, "←DVD" does not light up on the front display panel. Press **PROGRESSIVE SCAN** so that video output indicator (P) lights off on the front display panel.
- It may be impossible to dub a DVD-R or DVD-RW (Video mode) disc recorded on the devices from other manufacturers or on a PC. In such case, perform "Manual Dubbing (From DVD To VCR)" (pg. 68).
- It is not possible to perform other operations like Live Memory Playback. Check the recorded programme on the disc after dubbing.
- If "VCR→" lights up on the unit and you play back a DVD VIDEO disc, the images dubbed to the VCR deck may not be output to the TV properly.

Manual Dubbing (From DVD To VCR)

Dubbing A Part Of A Disc

You can dub the selected scenes on a tape to the DVD disc, starting and stopping wherever you wish.

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



1 For DVD deck

Load a disc you want to dub.

For VCR deck

Load a cassette with the record safety tab intact.

2 Press <DVD> to select the dubbing direction.

- "<DVD>" lights up on the front display panel.

3 Prepare the DVD deck for dubbing.

1 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.

2 Locate the point from where you want to start dubbing, then pause playback by pressing the following buttons: >>, <<, <DVD>, <DVD>.

4 Prepare the VCR deck for dubbing.

1 Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.

2 Press **REC MODE** repeatedly to set the recording mode.

3 Press and hold **II**, then press <DVD> so that the VCR deck enters the Record Pause mode.

5 Press and hold DUB for more than 2 seconds to start the dubbing.

6 Press <DVD> to stop recording on the VCR deck. Then press **VCR/DVD**, and press <DVD> to stop playback on the DVD deck.

NOTES:

- It is not possible to start dubbing if the unit retains a memory of the resume points. Press <DVD> twice to clear the resume points.
- There may be a discrepancy of several seconds between where you intend dubbing to start, and where it actually stars.
- The superimposed indication during the operation or dubbing is not recorded.
- When the end of the tape is reached during dubbing, the tape is ejected and both deck stops.
- When the progressive mode is set, "<DVD>" does not light up on the front display panel. Press **PROGRESSIVE SCAN** so that video output indicator (P) lights off on the front display panel.
- It is not possible to perform other operations like Live Memory Playback. Check the recorded programme on the disc after dubbing.

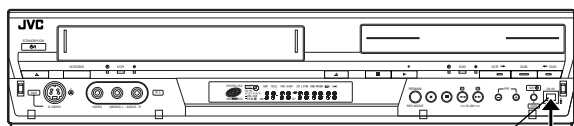
DV Dubbing (DVD Deck Only)

You can dub programmes from a camcorder or DV equipment connected to the unit with a DV cable. The unit's remote control allows you the limited control of the connected camcorder or DV equipment functions during dubbing.

NOTE:

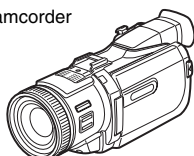
When you connect a PC to the DV IN connector, we do not assure the normal operation of this unit.

Your unit

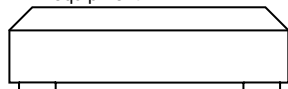


DV IN connector

Camcorder



DV equipment



DV cable
(VC-VDV 204U)
(not provided)


DV connector

1 Connect a camcorder or DV equipment to the DV IN connector on the unit's front panel.

2 Load a DVD-RAM/RW/R disc on the unit.

3 Press **PR +/-** to set the channel to "DV DUBBING".

- The "DV DUBBING" controller appears on the TV screen.
- If "DV DUBBING" does not appear on the "DV DUBBING" controller, make sure the DV equipment is connected correctly.

4 Press **< >** to select , then press **ENTER**.

5 Press **Δ ▽** to select the desired sound track, then press **ENTER**.

AUDIO 1: Select this to record the original stereo sound played back on the connected DV equipment.

AUDIO 2: Select this to record the dubbed stereo sound played back on the connected DV equipment.

MIX: Select this to record the sound of both "AUDIO 1" and "AUDIO 2".


- Note that this selection is not available when the source programme is recorded in 16BIT (48 kHz) mode.

6 Press **REC MODE** repeatedly to set the recording mode.

7 Locate the point from where you want to start dubbing, then stop or pause playback by pressing the following buttons on the remote control: **▶▶▶**, **◀◀◀**, **■**, **||**

- To play back in slow speed (1/10 of the normal speed), press **||** to pause playback, then press **◀◀◀** or **▶▶▶**.
- To play back frame-by-frame, press **||** to pause playback, then press **||** repeatedly. Each press of **||** advances a frame.
- To change the playback direction, press **◀◀◀** or **▶▶▶**.

8 Press **< >** to select , then press **ENTER**. The dubbing starts.

- Playback on the external DV equipment and recording on the unit should start simultaneously.
- When the playback from the beginning is not possible, the "DV DUBBING" controller cannot be used. Perform dubbing without using the "DV DUBBING" controller. (See below)
- To pause dubbing, press **< >** to select , then press **ENTER**. Both the unit and the external DV equipment pause dubbing. Pressing **||** on the unit also works the same way.
- To clear the "DV DUBBING" controller from the TV screen, press **ON SCREEN**.

9 Press **■** on the remote control to stop dubbing.

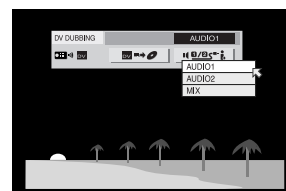
- Both the unit and the external DV equipment stop dubbing.

NOTES:

- Dubbing copyright guarded programmes is not possible.
- Original DV informations such as the recording date and time are not recorded.
- The superimposed indication during the operation or dubbing is not recorded.
- It is not possible to perform dubbing when "VCR→" lights up on the unit. Press **VCR→** so that "VCR→" lights off.

Performing dubbing without using the "DV DUBBING" controller

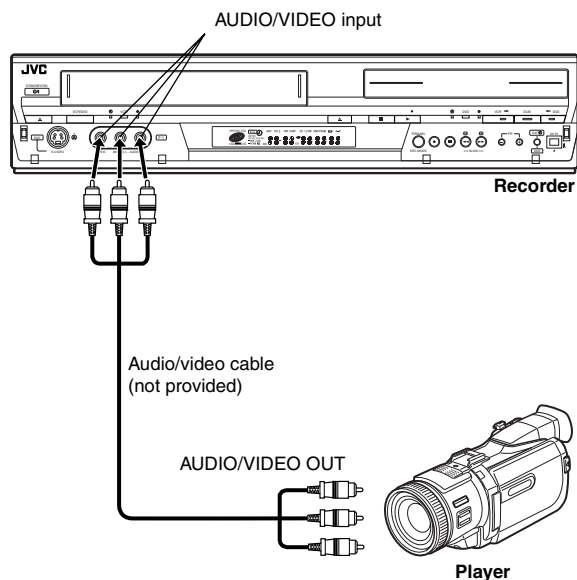
- 1 Press **PR +/-** to set the channel to "DV DUBBING".
- 2 Press **REC MODE** repeatedly to set the recording mode.
- 3 Start playback on the external DV equipment slightly before the actual point from where you wish to start dubbing.
- 4 Press **●** on the unit to start recording. Or press and hold **●** and press **▶** on the remote control. The dubbing starts.
- 5 When the dubbing ends, press **■** on the unit, then stop playback on the external DV equipment.



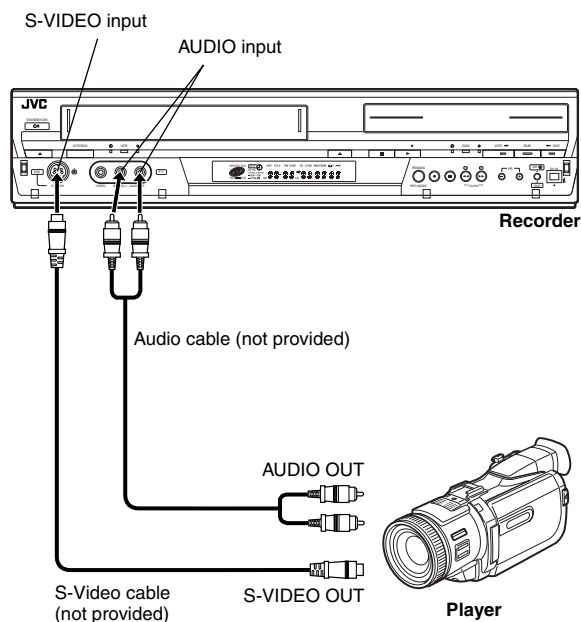
Edit From A Camcorder

You can use a camcorder as the source player and your unit as the recording deck.

1 If the camcorder has no S-VIDEO output connector:



2 If the camcorder has an S-VIDEO output connector (DVD deck only):



Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.

1 Make connections.

- 1 If the camcorder has no S-VIDEO output connector:
 - connect the camcorder's AUDIO/VIDEO OUT connectors to the unit's AUDIO/VIDEO input connectors on the front panel.
 - When using a monaural camcorder, connect its AUDIO OUT connector to the AUDIO L input connector on your unit.

2 If the camcorder has an S-VIDEO output connector: (DVD deck only)

- connect the camcorder's AUDIO OUT and S-VIDEO OUT connectors to the unit's AUDIO and S-VIDEO input connectors on the front panel.

2 Press **VCR/DVD** repeatedly to select the recording deck.

3 Press **PR +/-** to select "F-1".

For DVD deck

- Set "F-1 INPUT" to "VIDEO" for the VIDEO input connector, or "S-VIDEO" for the S-VIDEO input connector, depending on the connector being used. (pg. 73)

4 Press **REC MODE** repeatedly to set the recording mode.

5 Start playback on the camcorder slightly before the actual point from where you wish to start dubbing.

6 Press **●** on the unit to start recording. Or press and hold **●** and press **▶** on the remote control. The dubbing starts.

7 Press **■** on the unit, then stop playback on the camcorder.

NOTES:

- All necessary cables can be obtained from your dealer.
- Refer to the camcorder's instruction manual for operating procedure.
- The quality of dubbed picture becomes poorer than that of the original.

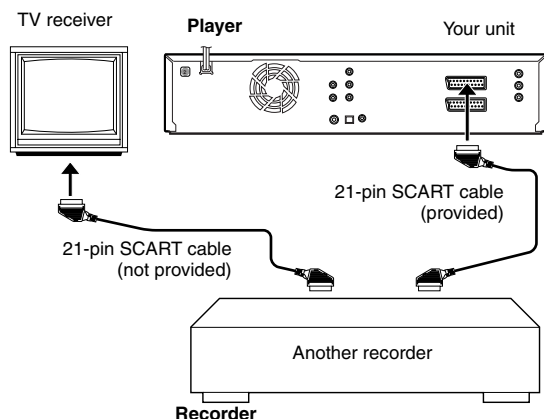
Edit To Or From Another Recorder

You can use your unit as the source player or as the recording deck.

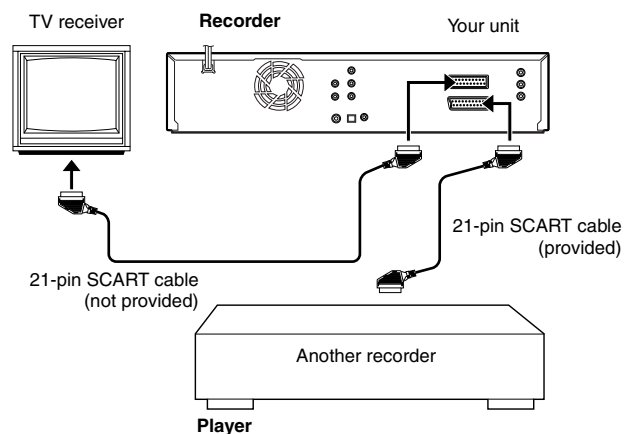
NOTE:

When using another recorder as the recording deck, refer to its instruction manual.

1 When using your unit as the source player:



2 When using your unit as the recording deck:



Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.

1 Connect the player's 21-pin SCART connector to the unit's 21-pin SCART connector as illustrated.

1 When using your unit as the source player:
— connect its L-1 IN/OUT connector to the recording deck.

2 When using your unit as the recording deck:
— connect its L-1 IN/OUT or L-2 IN/DECODER connector to the source player.

- If another recorder is compatible with the Y/C signal (DVD deck only):
— when using your unit as the source player, set "L-1 OUTPUT" to "SCART S-VIDEO". (pg. 72)
— when using your unit as the recording deck, set "L-2 SELECT" to "S-VIDEO". (pg. 72)

2 Press **VCR/DVD** repeatedly to select the recording deck.

3 Press **PR +/-** to select "L-1" for the L-1 IN/OUT connector, or "L-2" for the L-2 IN/DECODER connector, depending on the connector being used when using this unit as the recording deck.

For DVD deck

- When using the L-1 IN/OUT connector, set "L-1 OUTPUT" to "VIDEO" or "S-VIDEO". (pg. 72)
- When using the L-2 IN/DECODER connector, set "L-2 SELECT" to "VIDEO" or "S-VIDEO". (pg. 72)

4 Press **REC MODE** repeatedly to set the recording mode.

5 Engage the Play mode of the source player.

6 Engage the Record mode of the recording deck.

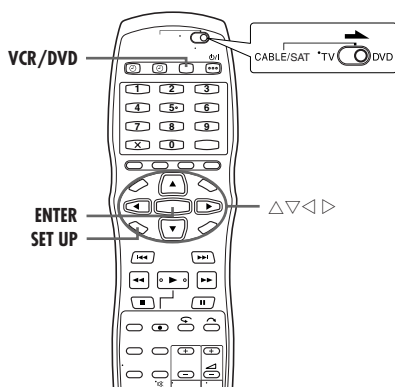
7 Stop recording on the recording deck, then stop playback on the source player.

NOTES:

- All necessary cables can be obtained from your dealer.
- For Y/C signal input/output, be sure to use a 21-pin SCART cable that is compatible with the Y/C signal.
- When you use this unit as the source player for editing, be sure to set "SUPERIMPOSE" or "O.S.D." to "OFF" before starting. (pg. 79, 80)
- If you are using another recorder with S-Video and Audio output connectors, connect its S-Video and Audio output connectors to this unit's S-VIDEO and AUDIO input connectors on the front panel. Then, set the unit's input mode to "F-1" in step 3, and set "F-1 INPUT" to "S-VIDEO". (pg. 73) (DVD deck only)

Output/Input Set

- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



L-1 Output And L-1 Input Setting

The L-1 IN/OUT connector accepts and delivers either a composite signal (regular video signal) or a Y/C signal (a signal in which the luminance and chrominance signals are separated). Set "L-1 OUTPUT" and "L-1 INPUT" to the appropriate mode depending on the type of appliance connected to the unit's L-1 IN/OUT connector.

- 1 Press **SET UP** to access the Main Menu screen.
- 2 Press $\triangleleft \triangleright$ to select "FUNCTION SET UP", then press **ENTER**.
- 3 Press $\triangleleft \triangleright$ to select "VIDEO IN/OUT", then press **ENTER**.
- 4 Press $\triangle \nabla$ to select "L-1 OUTPUT" or "L-1 INPUT", then press **ENTER**.

- 5 Press $\triangle \nabla$ to select the appropriate setting, then press **ENTER**.
- 6 Press **SET UP** to complete the setting.

NOTES:

- If "L-1 INPUT" or "L-1 OUTPUT" is set to "S-VIDEO", it is not possible to output colour signals correctly from the VCR deck.
- When the progressive mode is set, be sure to set "L-1 OUTPUT" to "COMPONENT". (pg. 72)
- If "L-1 OUTPUT" is not set to "COMPONENT", it is not possible to output images from the COMPONENT VIDEO OUT connector.

* The **boldface** settings below indicate the settings at your purchase.

■ L-1 OUTPUT — SCART VIDEO / SCART S-VIDEO / SCART RGB / COMPONENT

SCART VIDEO: If a connected appliance's input is compatible only with regular video signals, set to "SCART VIDEO".

SCART S-VIDEO: If a connected appliance's input is compatible with Y/C signals, set to "SCART S-VIDEO". You can obtain high-quality picture. (For connection, be sure to use a 21-pin SCART cable that is compatible with the Y/C signal.)

SCART RGB: If a connected appliance's input is compatible with RGB signals, set to "SCART RGB". You can obtain a high-quality RGB picture.

COMPONENT: If a connected appliance's input is compatible with Y/Pb/Pr signals, set to "COMPONENT". You can obtain a high-quality Y/Pb/Pr picture. Switch the TV to the input that you can watch component video pictures.

■ L-1 INPUT — VIDEO / S-VIDEO

VIDEO: If a connected appliance's output is compatible only with regular video signals, set to "VIDEO".

S-VIDEO: If a connected appliance's output is compatible with Y/C signals, set to "S-VIDEO". You can obtain a high-quality picture. (For connection, be sure to use a 21-pin SCART cable that is compatible with the Y/C signal.)

NOTES:

- If "L-1 OUTPUT" is set to "SCART S-VIDEO", "SCART RGB" or "COMPONENT", it is not possible to set "L-1 INPUT" to "S-VIDEO".
- If "L-2 SELECT" is set to "DECODER", it is not possible to set "L-1 INPUT" to "S-VIDEO".
- If "L-2 SELECT" is set to "DECODER", it is only possible to set "L-1 OUTPUT" to "SCART VIDEO".
- Component video signals are not output from the L-1 IN/OUT connector.
- When Progressive scan mode is engaged, it is not possible to select the setting of "L-1 OUTPUT". (pg. 72)

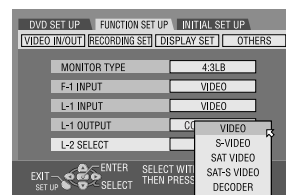
L-2 Select Setting

Set "L-2 SELECT" to the appropriate mode depending on the type of appliance connected to the unit's L-2 IN/DECODER connector.

- 1 Perform steps 1 and 2 of "L-1 Output And L-1 Input Setting" on the left column.
- 2 Press $\triangle \nabla$ to select "L-2 SELECT", then press **ENTER**.
- 3 Press $\triangle \nabla$ to select the appropriate setting, then press **ENTER**.
- 4 Press **SET UP** to complete the setting.

NOTES:

- If "L-2 SELECT" is set to "S-VIDEO", it is not possible to output colour signals correctly from the VCR deck.
- If "L-2 SELECT" is set to "DECODER", only the DVD deck operates properly.



* The **boldface** settings below indicate the settings at your purchase.

■ L-2 SELECT — VIDEO / S-VIDEO / SAT VIDEO / SAT S-VIDEO / DECODER

Select "VIDEO" or "S-VIDEO" to use this unit as the recording deck with the player connected to the L-2 IN/DECODER connector, or to use the satellite receiver connected to the L-2 IN/DECODER connector.

VIDEO: If a connected appliance's output is compatible only with regular video signals, set to "VIDEO".

S-VIDEO: If a connected appliance's output is compatible with Y/C signals, set to "S-VIDEO". You can obtain high-quality picture. (For connection, be sure to use a 21-pin SCART cable that is compatible with the Y/C signal.)

Select "SAT VIDEO" or "SAT S-VIDEO" to view a satellite programme with the TV set while the unit is turned off. (pg. 76)

SAT VIDEO: If a connected satellite receiver's output is compatible only with regular video signals, set to "SAT VIDEO".

SAT S-VIDEO: If a connected satellite receiver's output is compatible with Y/C signals, set to "SAT S-VIDEO". You can obtain a high-quality S-VHS picture. (For connection, be sure to use a 21-pin SCART cable that is compatible with the Y/C signal.)

DECODER: To use a decoder connected to the L-2 IN/DECODER connector.

NOTES:

- If you have a satellite receiver or a decoder connected to the L-2 IN/DECODER connector, be sure to set "L-2 SELECT" back to appropriate mode after editing.
- If you are not connecting a satellite receiver or a decoder to the L-2 IN/DECODER connector, leave "L-2 SELECT" set to "VIDEO".
- When "L-2 SELECT" is set to "SAT VIDEO" and "SAT S-VIDEO", "SAT" appears on the TV screen or front display panel instead of "L-2".
- If "L-1 OUTPUT" is set to "SCART S-VIDEO", it is not possible to set "L-2 SELECT" to "DECODER" or "SAT VIDEO".
- If "L-1 OUTPUT" is set to "SCART RGB", it is not possible to set "L-2 SELECT" to "DECODER" or "SAT S-VIDEO".
- If "L-1 OUTPUT" is set to "COMPONENT" and "L-2 SELECT" to "SAT VIDEO", "SAT S-VIDEO" or "DECODER", be sure to connect the L-1 IN/OUT connector with a TV.

F-1 Input Setting

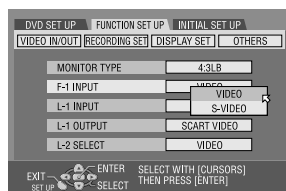
Set "F-1 INPUT" to the appropriate mode depending on the connector (VIDEO or S-VIDEO) being used on the front panel.

1 Perform steps **1** and **2** of "L-1 Output And L-1 Input Setting" (pg. 72).

2 Press $\Delta \nabla$ to select "F-1 INPUT", then press **ENTER**.

3 Press $\Delta \nabla$ to select the appropriate setting, then press **ENTER**.

4 Press **SET UP** to complete the setting.



* The **boldface** settings below indicate the settings at your purchase.

■ F-1 INPUT — VIDEO / S-VIDEO

VIDEO: When connecting an appliance to the VIDEO input connector, set to "VIDEO".

S-VIDEO: When connecting an appliance to the S-VIDEO input connector, set to "S-VIDEO".

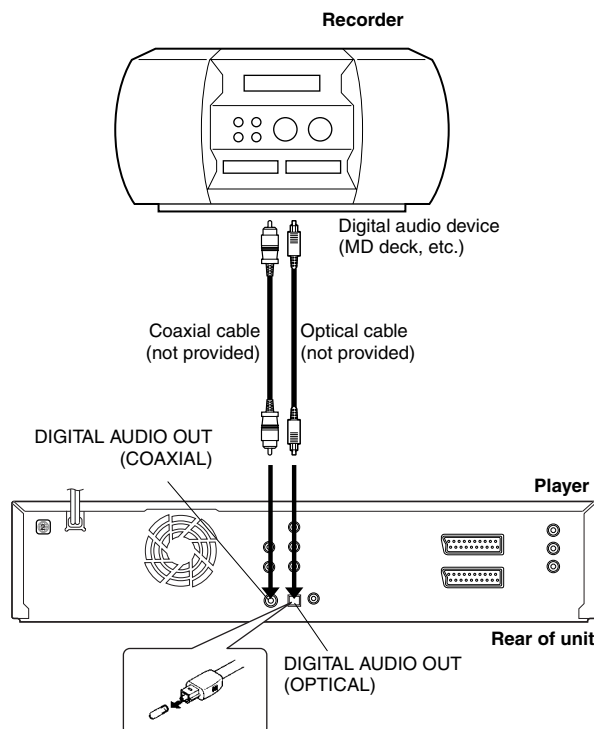
Digital Audio Dubbing

You can dub selected audio from a DVD or Audio CD disc to a digital audio device.

However, it is not possible to dub copy-protected discs.

- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.

Example: Dubbing to an MD



Note for connection:
Remove the protection cap from the cable.

- 1** Connect the unit and a digital audio device using either an optional optical cable or an optional coaxial cable.
- 2** Place a disc on the unit and load an MD on the connected digital audio device.
- 3** Select the audio to be dubbed.
- 4** Start playback slightly before the actual point from where you wish to start dubbing.
- 5** Press **II** to pause playback.
- 6** Select the input mode on the connected digital audio device.
- 7** Press **▶** to start playback on the unit.
- 8** Start recording on the digital audio device.
- 9** Stop recording on the digital audio device. Then press **■** to stop playback on the unit.

NOTE:

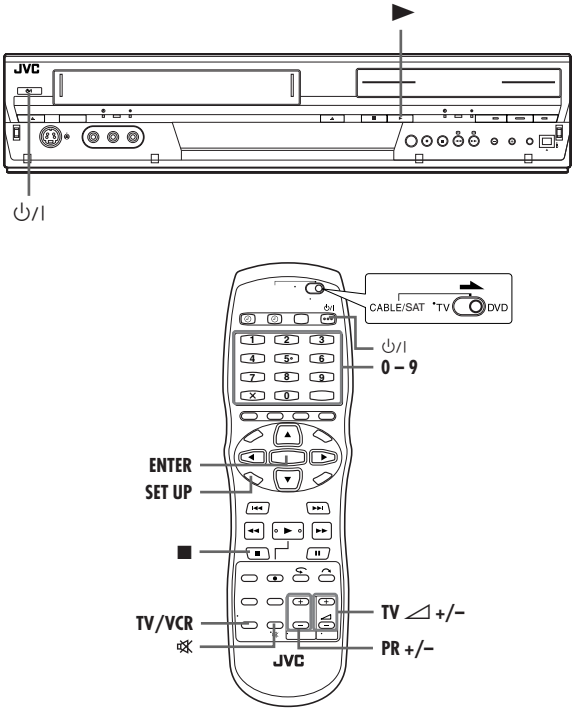
There may be a discrepancy of several seconds between where you intend editing to start, and where it actually starts.

Remote Control Functions

Remote control 1/2/3/4 Code Switching

The remote control is capable of controlling four JVC video units independently. Each of the units can respond to one of four codes (1, 2, 3 or 4). The remote control is preset to send 3 code signals because your unit is initially set to respond to 3 code signals. You can easily modify your unit to respond to 1, 2 or 4 code signals.

Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



- Keep pressing **SET UP** down during step 1.
- 1** Press the **number key** “1” for 1, “2” for 2, “3” for 3 or “4” for 4 to change the remote control code, then press **ENTER**.
- 2** Press **⏻** on the unit to turn off the unit.
- 3** Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.
- 4** Press **▶** on the unit for over 5 seconds while the unit is turned off. The code currently set appears on the front display panel.
- 5** Press **■** on the remote control to change the unit's code. The code currently set on the remote control blinks on the front display panel for approximately 5 seconds, and is applied to the unit.

NOTE:
When “POWER SAVE” is set to “ON” (pg. 79), it is not possible to change the remote code.

TV Multi-Brand Remote Control

Your remote control can operate the basic functions of your TV set. In addition to JVC TVs, other manufacturer's TVs can also be controlled.

- Turn off the TV using its remote control.
- Slide the **TV/CABLE/SAT/DVD** switch to **TV**.

IMPORTANT:

Although the provided remote control unit is compatible with JVC televisions, as well as many other models, it may not work with your TV, or in some instances, may have limited function capability.

- Keep pressing **SET UP** down during step 1.
- 1** Enter your TV's brand code using the **number keys**, then press **ENTER**.
- 2** Press **⏻** on the unit's remote control to turn on the TV and try operations (step 3).
- Once you have set the remote control to operate the TV, you do not have to repeat this step until you replace your remote control's batteries.
- Some brands of TVs have more than one code. If the TV does not function with one code, try entering another.
- 3** Press the corresponding button to operate the TV: **⏻**, **TV/VCR**, **PR +/-**, **TV** **▲ +/-**, **⏻** (TV Muting), **number keys**.
- For some brands of TVs, you must press **ENTER** after having pressed the **number keys**.

BRAND NAME	CODE
JVC	01, 03
HITACHI	10
MAGNAVOX	02
MITSUBISHI	03
PANASONIC	04, 11
RCA	05
SHARP	06
SONY	07
SAMSUNG	12
SANYO	13
SEARS	13
TOSHIBA	08
ZENITH	09

Satellite Receiver Multi-Brand Remote Control

Your remote control can operate the basic functions of your satellite receiver set. In addition to JVC satellite receivers, other manufacturer's satellite receivers can also be controlled.

Slide the **TV/CABLE/SAT/DVD** switch to **CABLE/SAT**.

IMPORTANT:

Although the provided remote control unit is compatible with JVC satellite receivers, as well as many other models, it may not work with your satellite receiver, or in some instances, may have limited function capability.

- Keep pressing **SET UP** down during step 1.

1 Enter your satellite receiver's brand code using the **number keys**, then press **ENTER**.

2 Press $\odot/1$ on the unit's remote control to turn on the satellite receiver and try operations (\rightarrow step 3).

- Once you have set the remote control to operate the satellite receiver, you do not have to repeat this step until you replace your remote control's batteries.
- Some brands of satellite receiver have more than one code. If the satellite receiver does not function with one code, try entering another.

3 Press the corresponding button to operate the satellite receiver: $\odot/1$, **PR +/-**, **number keys**.

- For some brands of satellite receiver, you must press **ENTER** after having pressed the **number keys**.
- The **number keys** may not function with some satellite receivers.

BRAND NAME	CODE
JVC	73
AMSTRAD	60, 61, 62, 63, 92
CANAL SATELLITE	81
CANAL +	81
D-BOX	85
ECHOSTAR (VIA DIGITAL)	82
FINLUX	68
FORCE	89
GALAXIS	88
GRUNDIG	64, 65, 102
HIRSCHMANN	64, 78, 99
HUMAX	88
ITT NOKIA	68
KATHREIN	70, 71, 96
LUXOR	68
MASCOM	93
MASPRO	70
NOKIA	87, 94
PACE	65, 67, 74, 86, 92
PANASONIC	74, 92
PHILIPS	66, 84, 101
RADIX	78
RFT	69
SABA	97
SAGEM	83, 90
SALORA	68
SAMSUNG	83
SIEMENS	64
SKYMASTER	69, 98
TECHNISAT	66, 100
THOMSON	97
TPS	83
TRIAX	91
WISI	64

Connecting To A Satellite Receiver

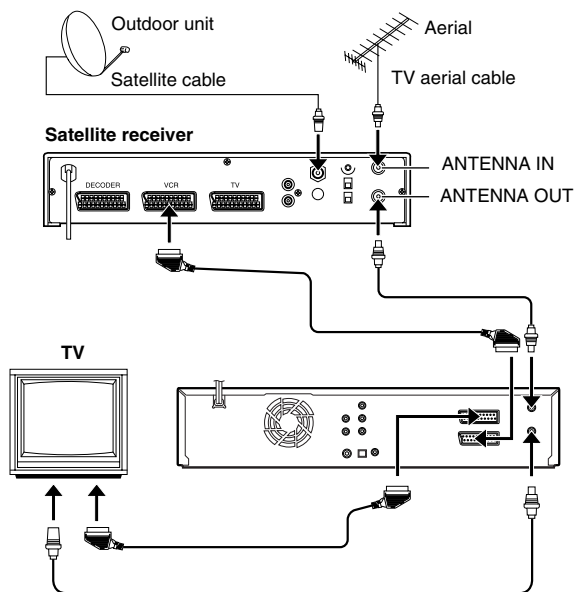
Simple Connections

This is an example of a simple connection if your TV has one 21-pin AV input (SCART) connector.

Connect the satellite receiver to the L-2 IN/DECODER connector, then connect the L-1 IN/OUT connector to the TV's connector.

NOTES:

- Set "L-2 SELECT" to "VIDEO" or "S-VIDEO". (pg. 72)
- You can use the Automatic Satellite Programme Recording function (pg. 48) with this connection. (DVD deck only)
- To record a programme via the satellite receiver, select L-2 mode by pressing **PR +/-** so that "L-2" appears on the front display panel.
- For details, refer to the instruction manual of the satellite receiver.



IMPORTANT

When you set "L-2 SELECT" to "SAT VIDEO" or "SAT S-VIDEO" (pg. 72), it is possible to view a satellite broadcast with the TV set to its AV mode even if the unit is turned off. When the unit is in Stop mode or recording, press **TV/VCR** on the remote control to turn off the VCR indicator on the unit.

- If you turn on the unit when the satellite receiver's power is off, nothing appears on the TV screen. In this case, turn on the satellite receiver, or set the TV to its TV mode, or press **TV/VCR** on the remote control to set the unit to the AV mode.

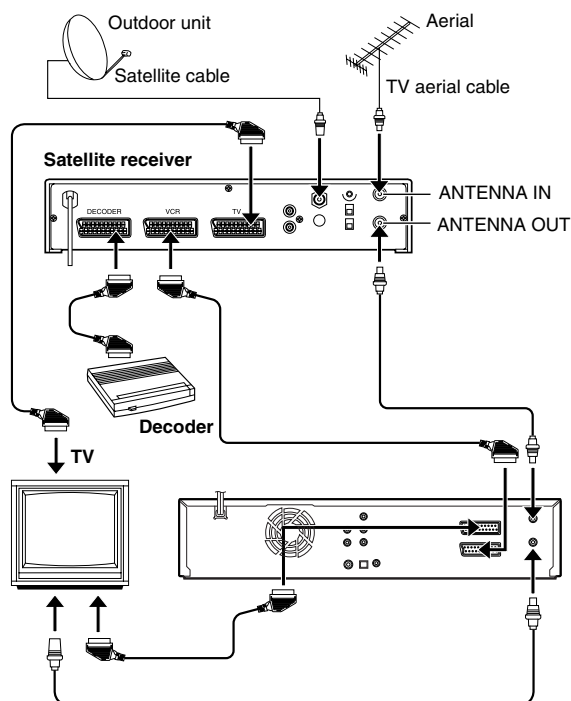
Perfect Connections (Recommended)

This is an example of recommended connections if your TV has two 21-pin AV input (SCART) connectors.

Connect the decoder to the satellite receiver's connector if you have a decoder, L-1 IN/OUT connector to TV's connector, and L-2 IN/DECODER connector to the satellite receiver's connector. Then connect the satellite receiver and TV.

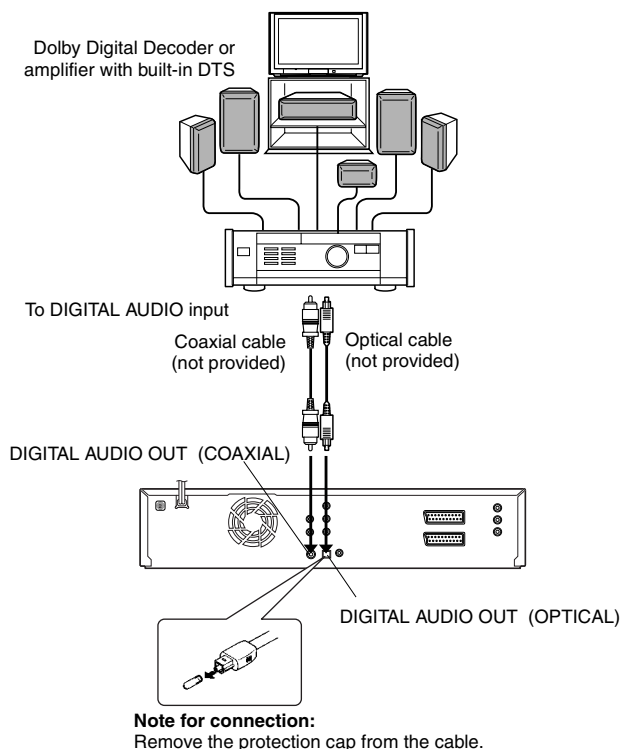
NOTES:

- Set "L-2 SELECT" to "VIDEO" or "S-VIDEO". (pg. 72)
- You can use the Automatic Satellite Programme Recording function (pg. 48) with this connection. (DVD deck only)
- To record a programme via the satellite receiver, select L-2 mode by pressing **PR +/-** so that "L-2" appears on the front display panel.
- To receive a scrambled broadcast, descramble the signal with the decoder connected to the satellite receiver.
- For details, refer to the instruction manual of the satellite receiver and decoder.



Connecting To A Dolby Digital Decoder Or An Amplifier With Built-in DTS

These instructions enable you to connect your unit to a Dolby Digital decoder or an amplifier with built-in DTS.



1 Connect the unit and a Dolby Digital decoder or an amplifier with built-in DTS using either an optional optical cable or an optional coaxial cable.

NOTES:

- For Dolby Digital sound, set "DIGITAL AUDIO OUT" to "DOLBY DIGITAL/PCM". (pg. 78)
- For DTS sound, set "DIGITAL AUDIO OUT" to "STREAM/PCM". (pg. 78)

CAUTIONS:

- This unit has a dynamic range of more than 110 dB with regards to its Hi-Fi audio capability. It is recommended that you check the maximum level if you are going to listen to the Hi-Fi audio signals through a stereo amplifier. A sudden surge in the input level to the speakers may damage them.
- Some speakers and televisions are specially shielded to prevent television interference. If both are of the non-shielded type, do not place the speakers adjacent to the TV set as this can adversely affect the playback picture.

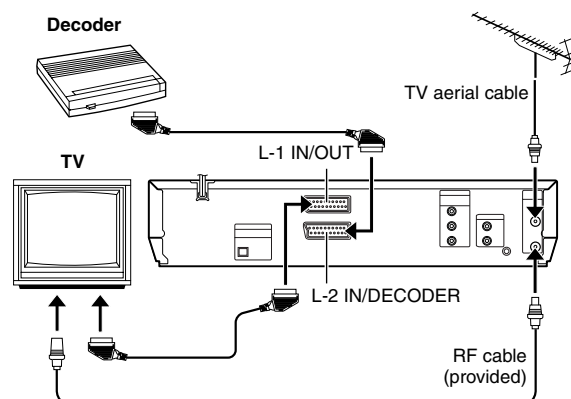
When you can't switch the audio channel of a bilingual programme

When the unit is connected with a digital audio device using an optional optical cable and "DIGITAL AUDIO OUT" is set to "DOLBY DIGITAL/PCM", it is not possible to switch the audio channel of a bilingual programme recorded on a DVD-RAM or DVD-RW (VR mode) disc. In this case, perform the following steps using the remote control to switch "DIGITAL AUDIO OUT" from "DOLBY DIGITAL/PCM" to "PCM ONLY".

- 1 Press **SET UP** to access the Main Menu screen.
- 2 Press $\triangleleft \triangleright$ to select "DVD SET UP", then press **ENTER**.
- 3 Press $\triangleleft \triangleright$ to select "AUDIO OUTPUT", then press **ENTER**.
- 4 Press $\triangle \nabla$ to select "DIGITAL AUDIO OUT", then press **ENTER**.
- 5 Press $\triangle \nabla$ to select "PCM ONLY", then press **ENTER**. (pg. 78)
- 6 Press **SET UP** to complete the setting.
- 7 Press **AUDIO** to select the desired audio channel. (pg. 28)

Connecting/Using A Decoder (DVD Deck Only)

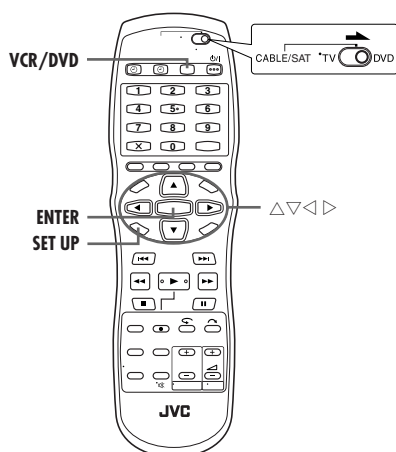
The L-2 IN/DECODER connector can be used as an input connector for an external decoder (descrambler). Simply connect a decoder and you can enjoy a variety of programming that is available through scrambled channels.



- 1 Set "L-2 SELECT" to "DECODER". (pg. 72)
- 2 Connect your unit's L-2 IN/DECODER connector to the decoder's 21-pin SCART connector using a 21-pin SCART cable.
- 3 Perform the procedure as described in "When Receiving A Scrambled Broadcast (DVD Deck Only)" (pg. 84). (DVD deck only)

Mode Set (DVD Deck)

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.

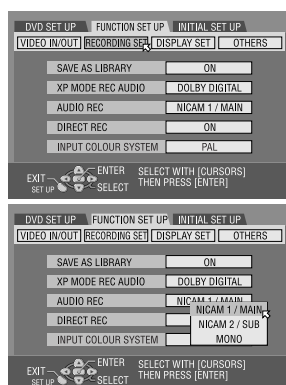


Various modes of this unit are categorized into menus nested in 2 levels shown in the following table. To change the settings of these modes, find the desired mode in the menu (for details on each menu, see pages 78 through 79), then follow the procedure below.

DVD SET UP	LANGUAGE SET (pg. 20) AUDIO OUTPUT (pg. 78) UTILITY (pg. 39, 86)
FUNCTION SET UP	VIDEO IN/OUT (pg. 23, 72) RECORDING SET (pg. 79) DISPLAY SET (pg. 79) OTHERS (pg. 79)
INITIAL SET UP	AUTO CH SET (pg. 82) MANUAL CH SET (pg. 83) SAT/GUIDE PR (pg. 21, 82) CLOCK SET (pg. 85)

- The procedure below shows how to set the desired option of the "AUDIO REC" mode as an example.

- 1 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.
- 2 Press **SET UP** to access the Main Menu screen.
- 3 Press $\triangleleft \triangleright$ to select "FUNCTION SET UP", then press **ENTER**.
- 4 Press $\triangleleft \triangleright$ to select "RECORDING SET", then press **ENTER**.
- 5 Press $\triangle \nabla$ to select "AUDIO REC", then press **ENTER**.
- 6 Press $\triangle \nabla$ to select the desired option, then press **ENTER**.
- 7 Press **SET UP** to complete the setting.



* The **boldface** settings below indicate the settings at your purchase.

AUDIO OUTPUT

■ DIGITAL AUDIO OUT — DOLBY DIGITAL/PCM / **STREAM/PCM** / PCM ONLY

Select the appropriate mode according to the type of the device connected to DIGITAL AUDIO OUT connector.

DOLBY DIGITAL/PCM: Select this when you connect the digital input connector of a Dolby Digital decoder or an amplifier with a built-in Dolby Digital decoder.

STREAM/PCM: Select this when you connect the digital input connector of an amplifier with a built-in DTS, Dolby Digital, or MPEG multichannel decoder.

PCM ONLY: Select this when you connect the linear PCM digital input of other audio equipment (amplifier, MD or DAT deck, etc.).

■ ANALOG AUDIO OUT — **STEREO** / DOLBY SURROUND

Select the appropriate setting to accommodate the unit to the connected A/V equipment. This function takes effect when a DVD VIDEO disc is played back.

STEREO: Select this when listening to conventional two-channel stereo audio with the unit's AUDIO OUTPUT connectors connected to a stereo amplifier/receiver or TV set, or in case you want to record the audio from a DVD VIDEO disc to a Mini Disc, etc.

DOLBY SURROUND: Select this when listening to multichannel surround audio with the unit's AUDIO OUTPUT connectors connected to an amplifier/receiver with a built-in surround decoder or a surround decoder.

■ D. RANGE CONTROL — **NORMAL** / WIDE RANGE / TV MODE

The dynamic range (the difference between the loudest sound and the quietest one) can be compressed during playback of a programme encoded in Dolby Digital format.

This function takes effect when a DVD VIDEO disc recorded in Dolby Digital format is played back at low or middle volume.

NORMAL: Normally select this setting to activate this function.

WIDE RANGE: Select this to deactivate this function when you enjoy wide dynamic range programme.

TV MODE: Select this when you hear the sound through the TV's speaker(s).

NOTES:

- This function takes no effect on programmes other than that recorded in Dolby Digital format.
- This function does not work when Simulated Surround Effect is activated. (pg. 36)
- The effect of "NORMAL" and "WIDE RANGE" may not be different depending on discs.

■ OUTPUT LEVEL — **STANDARD** / LOW

You can lower the output level of analog audio to accommodate the unit to the connected A/V equipment.

STANDARD: Normally select this setting.

LOW: The output level of analog audio is lowered.

RECORDING SET

■ SAVE AS LIBRARY — OFF / ON

When this function is set to "ON", the recording information is automatically stored in the library. For details, refer to "Modify Library Information" (ⓘ pg. 63).

■ XP MODE REC AUDIO — DOLBY DIGITAL / LINEAR PCM

You can select the audio format when you record a programme in XP mode. When this function is set to "LINEAR PCM", you can obtain a high-quality audio sound.

DOLBY DIGITAL: To record in Dolby Digital format.

LINEAR PCM: To record in Linear PCM format.

■ AUDIO REC — NICAM 1/MAIN / NICAM 2/SUB / MONO

You can select the desired NICAM audio channel to be recorded on a DVD-R/RW (Video mode) disc.

NICAM 1/MAIN: To record the main language of NICAM audio.

NICAM 2/SUB: To record the sub language of NICAM audio.

MONO: To record the standard (monaural) sound of NICAM audio.

NOTE:

This function works only for the NICAM bilingual programme.

■ DIRECT REC — OFF / ON

When this function is set to "ON", you can easily start recording the programme that you are watching on your TV. Press and hold ● and press ► on the remote control, or press ● on the unit.

NOTES:

- Recording is not possible on the VCR deck.
- When you use the Direct Rec function, be sure to use a TV offering T-V LINK, etc. and connect a fully-wired 21-pin SCART cable between the unit and the TV. (ⓘ pg. 16)
- If "DIRECT REC" is set to "OFF", the ● button functions as described in "Basic Recording" (ⓘ pg. 40, 52).
- During Direct Rec, "--" appears on the front display panel.
- If a programme is recorded with the Direct Rec, the station name will not be registered in the library. "----" will be displayed for the station name.
- Even if there is no power supply for more than 60 minutes, the unit keeps the setting.

■ INPUT COLOUR SYSTEM — PAL / SECAM

You can play back PAL discs, or record PAL and SECAM signals on this unit. Select the appropriate colour system.

PAL: To record PAL signals.

SECAM: To record SECAM signals.

DISPLAY SET

■ SUPERIMPOSE — OFF / AUTO

When this function is set to "AUTO", various operational indicators appear on the TV screen. Messages appear in the selected language. (ⓘ pg. 20)

OFF: To turn off superimposed indications.

AUTO: To superimpose operational indications for approximately five seconds just after the corresponding operation.

NOTES:

- Even when "SUPERIMPOSE" is set to "OFF", you can display the various operational indicators by pressing **ON SCREEN**. To clear the operational indicators, press **ON SCREEN** again.
- When you use this unit as the source player for editing, be sure to set "SUPERIMPOSE" to "OFF" before starting. (ⓘ pg. 79)
- When you select "AUTO", during playback, the operation mode indicators may be disturbed depending on the type of disc being used.

■ GREY BACK — OFF / ON

When this function is set to "ON", the TV screen becomes all grey when receiving a channel not in use.

NOTE:

When you want to receive an unstable channel with poor signals, set this function to "OFF".

■ DIMMER — BRIGHT / DIM

You can change the brightness of the front display panel.

BRIGHT: Normally select this.

DIM: To dim the front display panel. (Blue lamp on the front display panel is turned off.)

■ POWER SAVE — OFF / ON

When this function is set to "ON", you can reduce the power consumption while the unit is turned off.

NOTES:

- During Power Save mode —
 - the front display panel will be turned off.
 - the Just Clock function (ⓘ pg. 85) does not work.
- Power Save does not work when —
 - the unit is in the Timer mode.
 - the unit's power is turned off after timer-recording or Instant Timer Recording.
 - the Automatic Satellite Programme Recording mode is engaged. (ⓘ pg. 48)
 - "L-2 SELECT" is set to "DECODER", "SAT VIDEO" or "SAT S-VIDEO". (ⓘ pg. 72)
- It takes some time for the unit to complete initialisation after you turn on unit power, with "WAKE UP" blinking on the front display panel.

■ ON SCREEN LANGUAGE

This unit offers you the choice to view on-screen messages in 10 different languages. Though Auto Set Up selects the language automatically (ⓘ pg. 19), you can change the language setting manually as required.

For details, refer to "On-screen Language Set" (ⓘ pg. 20).

OTHERS

■ RESUME — ON / OFF / DISC RESUME

When this function is set to "ON" or "DISC RESUME", you can use the resume function. (ⓘ pg. 26)

ON: You can start playback from the resume point of the placed disc.

OFF: You cannot use the resume function.

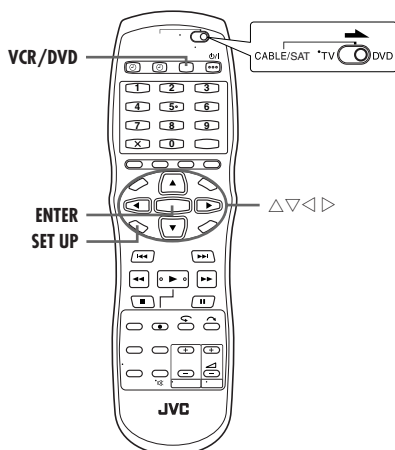
DISC RESUME: The unit retains a memory of the resume points of the last 30 discs played back, even though they have been ejected.

NOTE:

"DISC RESUME" setting works on DVD VIDEO, VCD, SVCD and already finalised DVD-R/DVD-RW (video mode) discs. For other types of discs, the function under "ON" setting will be applied even if "RESUME" is set to "DISC RESUME".

Mode Set (VCR Deck)

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



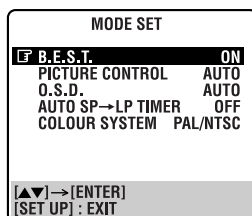
You can change various mode settings on the Function Set screen. To change the settings of these modes, find the desired mode in the menu (for details on each menu, see pages 80 through 81), then follow the procedure below.

1 Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.

2 Press **SET UP** to access the Function Set screen.

3 Press **△▽** to select the item you want to change, then press **ENTER** or **▶** to select the desired mode.

4 Press **SET UP** to complete the setting.



* The **boldface** settings below indicate the settings at your purchase.

■ B.E.S.T. — ON / OFF

You can set the B.E.S.T. (Biconditional Equalised Signal Tracking) system to "ON" or "OFF". (⌚ pg. 53)

NOTES:

- When watching a tape recorded with "B.E.S.T." set to "ON", it is recommended that you leave B.E.S.T. on during playback as well.
- When watching a rental tape or one recorded on another video recorder, or when using this unit as the player for editing, set B.E.S.T. to your preference.
- The B.E.S.T. system works for both SP and LP modes only after a tape has been inserted and the Record mode is first initiated. It does not work during recording.
- The B.E.S.T. system does not work while Automatic Satellite Programme Recording is in progress. (⌚ pg. 48)
- In the case of timer recordings, the B.E.S.T. system works before recording is initiated.
- Once the cassette is ejected, the B.E.S.T. data is cancelled. The next time the cassette is used for recording, B.E.S.T. is re-performed.
- Pressing the unit's **●** button while "BEST" is displayed does not start Instant Timer Recording. (⌚ pg. 53)

■ PICTURE CONTROL — AUTO / EDIT / SOFT / SHARP

This feature helps you to adjust the playback picture quality according to your preference. Normally select "AUTO".

AUTO: Picture quality is adjusted automatically.

EDIT: Minimises picture degradation during editing (recording and playback).

SOFT: Reduces image coarseness when viewing overplayed tapes containing a lot of noise.

SHARP: Clearer, sharper-edged picture when viewing images with lots of flat, same-coloured surfaces such as cartoons.

NOTES:

- When you select "EDIT", "SOFT" or "SHARP", the selected mode will not change until you select another mode.
- When you select "EDIT" to dub tapes, be sure to select "NORM" after you finish dubbing the tapes.
- When "B.E.S.T." is "OFF", "PICTURE CONTROL" switches automatically from "AUTO" to "NORM".

■ O.S.D. — AUTO / OFF

When this function is set to "AUTO", various operational indicators appear on the TV screen. Messages appear in the selected language. (⌚ pg. 20)

NOTES:

- Even when "O.S.D." is set to "OFF", you can display the various operational indicators by pressing **ON SCREEN**. To clear the operational indicators, press **ON SCREEN** again.
- When you use this unit as the source player for editing, be sure to set "O.S.D." to "OFF" before starting.
- During playback, the operation mode indicators may be disturbed depending on the type of tape being used.

■ AUTO SP→LP TIMER — ON / OFF

When this function is set to "ON", the unit automatically switches to LP mode to allow complete recording if there is not enough tape to record the entire programme while timer-recording in SP mode.

For Example:

Recording a programme of 140 minutes in length onto a 120-minute tape

Approximately 110 minutes	Approximately 30 minutes
SP mode	LP mode
Total 140 minutes	

Make sure you set this function to "ON", before the timer-recording starts.

NOTES:

- If you have programmed the unit to timer-record 2 or more programmes, the second programme and those thereafter may not fit on the tape if you set "AUTO SP→LP TIMER" to "ON". In this case, make sure the mode is not engaged, then set the tape speed manually during timer programming.
- In order to ensure that the recording fits on the tape, this feature may leave a slight non-recorded section at the end of the tape.
- There may be some noise and sound disturbance at the point on the tape where the unit switches from SP to LP mode.
- The Auto SP→LP Timer feature is not available during ITR (Instant Timer Recording), and the feature will not work properly on the following tapes: T(ST)-30, T(ST)-60, T(ST)-90, and T(ST)-120

■ COLOUR SYSTEM — PAL/NTSC / MESECAM

You can play back PAL, NTSC and MESECAM tapes, or record PAL and SECAM* signals on this unit. Select the appropriate colour system.

* SECAM signals will be recorded as MESECAM on this unit; MESECAM is the designation for tapes with SECAM signals that have been recorded on a MESECAM-compatible PAL video cassette recorder.

PAL/NTSC: To record PAL signals, or play back a PAL or NTSC tape.

MESECAM: To record SECAM signals, or play back a MESECAM tape.

NOTES:

About NTSC Playback

- Some TVs shrink the picture vertically and place black bars at the top and bottom of the TV screen. This is not a malfunction on the part of either the unit or the TV.
- The picture may roll up and down. This can be corrected using the V-HOLD control found on some TVs. (This cannot be corrected if the TV does not have a V-HOLD control.)
- The counter and tape remaining time readings will be incorrect.
- During search, still, or frame-by-frame playback, the picture will be distorted, and there may be a loss of colour.
- Depending on the type of TV, the top and bottom portions of superimposed displays may be cut off during NTSC playback.

SHOWVIEW™ System Setup

IMPORTANT:

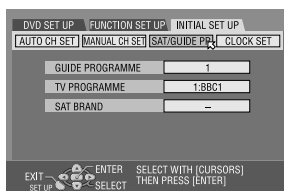
Normally, Auto Set Up (pg. 17), Preset Download (pg. 18) or Auto Channel Set (pg. 82) sets the Guide Program numbers automatically. You need to set the Guide Program numbers manually only in the following cases.

- When timer-programming with the SHOWVIEW system, the channel position, where the station you wish to record is received on your unit, is not selected, **OR** when you add a channel after Auto Set Up, Preset Download or Auto Channel Set has taken place, —Set the Guide Program number for that station manually.
- When you wish to timer-record a satellite programme with the SHOWVIEW system, —Set the Guide Program numbers for all satellite broadcasts received on your satellite receiver.

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.

Guide Program Number Set

- Press **SET UP** to access the Main Menu screen.
- Press $\triangleleft \triangleright$ to select "INITIAL SET UP", then press **ENTER**.
- Press $\triangleleft \triangleright$ to select "SAT/GUIDE PR", then press **ENTER**.
- Press $\triangle \nabla$ to select "GUIDE PROGRAMME", then press **ENTER**.
- Press $\triangle \nabla$ to select the Guide Program number for the desired station as shown in the TV listings. Then press **ENTER**.
 - To change the Guide Program number in 10 increments, press and hold $\triangle \nabla$.
- Press $\triangle \nabla$ to select "TV PROGRAMME", then press **ENTER**.
- Press $\triangle \nabla$ to select the number of the unit's channel position on which the Guide Program number's broadcast is received by the unit or the satellite receiver. Then press **ENTER**.
 - Pressing **AUX** changes "TV PROGRAMME" to "SAT".
 - To timer-record a satellite programme with the SHOWVIEW system, you need to install a provided Satellite Controller and perform the procedure described in "Satellite Receiver Control Setting (DVD Deck Only)" (pg. 21).
 - Repeat steps 4 and 7 as necessary.
- Press **SET UP** to complete the setting.



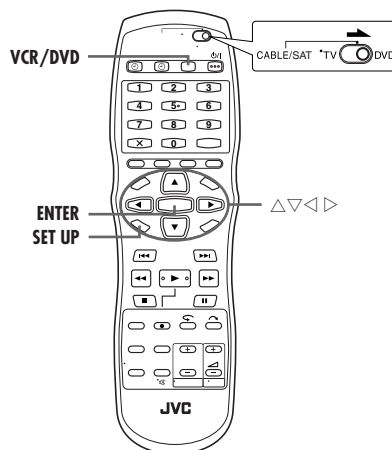
Guide Program Number

"Guide Program (GUIDE PROGRAMME) number" refers to the assigned TV station numbers, according to broadcast area, for the SHOWVIEW timer recording. The Guide Program numbers can be found in most TV listings.

Tuner Set

Your unit needs to memorise all necessary stations in channel positions in order to record TV programmes. Auto Channel Set automatically assigns all receivable stations in your area to call them up by using the **PR +/-** buttons without going through any vacant channels.

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.

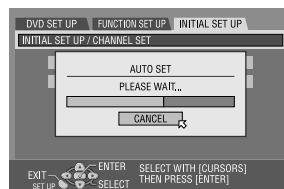
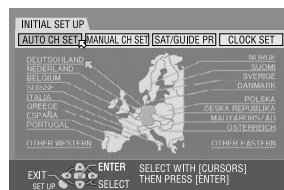


IMPORTANT:

Perform the following steps only if —
 — Auto Channel Set has not been set correctly by Auto Set Up or by Preset Download. (pg. 17, 18)
 — you have moved to a different area or if a new station starts broadcasting in your area.

Auto Channel Set

- Press **SET UP** to access the Main Menu screen.
- Press $\triangleleft \triangleright$ to select "INITIAL SET UP", then press **ENTER**.
- Press $\triangleleft \triangleright$ to select "AUTO CH SET", then press **ENTER**.
- Press $\triangle \nabla \triangleleft \triangleright$ to select your country's name, then press **ENTER**.
- Press $\triangle \nabla \triangleleft \triangleright$ to select the language of your choice.
- Press **ENTER** twice.
 - When you have connected the unit to a TV offering T-V Link via a fully-wired 21-pin SCART cable (pg. 18), the unit automatically performs the Preset Download and the T-V LINK screen will appear. (pg. 18)
 - The Auto Set screen appears, and remains on screen while the unit searches for receivable stations. Wait until the TV screen as shown in step 7 appears.



Delete A Channel

- 1 Perform steps 1 and 3 of "Manual Channel Set" (pg. 83) to access the Confirmation screen before continuing.
- 2 Press $\triangle \nabla \triangleleft \triangleright$ to select the item you want to delete.
- 3 Press **X** to delete a channel. The item next to the cancelled one moves up one line.
 - Repeat steps 2 and 3 as necessary.
- 4 Press **SET UP** to close the Confirmation screen.

Change Station Channel Position

- 1 Perform steps 1 and 3 of "Manual Channel Set" (pg. 83) to access the Confirmation screen before continuing.
- 2 Press $\triangle \nabla \triangleleft \triangleright$ to select the item you want to move, then press **ENTER**.
- 3 Press $\triangle \nabla \triangleleft \triangleright$ to select the new channel position, then press **ENTER**.

Example: If you moved the station in position 4 to position 2, the stations originally in positions 2 and 3 each move down one space.

DVD SET UP

FUNCTION SET UP

INITIAL SET UP

INITIAL SET UP / CHANNEL SET

PR	CH	ID		PR	CH	ID	
01	25	ARD	08	C26	E-SP		
02	C08	SKY1	09	55	WEST		
03	10	ZDF	10	C24	SAT1		
04	C63	RAI1	11	C23	OSF		
05	C31	BBC1	12				
06	C32	BBC2	13				
07	C33	3SAT	14				

EXIT SET UP

ENTER SELECT

SELECT WITH [CURSORS]
THEN PRESS [ENTER]

DVD SET UP

FUNCTION SET UP

INITIAL SET UP

INITIAL SET UP / CHANNEL SET

PR	CH	ID		PR	CH	ID	
01	25	ARD	08	G26	E-SP		
02	C05	RAI1	09	55	WEST		
03	C08	SKY1	10	C24	SAT1		
04	10	ZDF	11	C23	OSF		
05	C31	BBC1	12				
06	C32	BBC2	13				
07	C33	3SAT	14				

EXIT SET UP

ENTER SELECT

SELECT WITH [CURSORS]
THEN PRESS [ENTER]

- Repeat steps 2 and 3 as necessary.
- 4 Press **SET UP** twice to close the Confirmation screen.

When Receiving A Scrambled Broadcast (DVD Deck Only)

- 1 Set "L-2 SELECT" to "DECODER". (pg. 72)
- 2 Perform steps 1 and 3 of "Manual Channel Set" (pg. 83).
- 3 Press $\triangle \nabla \triangleleft \triangleright$ to select the channel position broadcasting scrambled programmes, then press **ENTER** twice.
- 4 Press $\triangle \nabla$ to select "DECODER", then press **ENTER**.
- 5 Press $\triangle \nabla$ to set "DECODER" to "ON", then press **ENTER**.
- 6 Press **RETURN** to return to the Confirmation screen.
 - Repeat steps 3 – 6 as necessary.
- 7 Press **SET UP** twice to close the Confirmation screen.

INFORMATION

If you live in Eastern Europe, "TV SYSTEM" setting appears instead of "DECODER" setting on the Manual Channel Set screen. When you can see the picture but can hear no audio, select appropriate TV system (D/K or B/G). Normally, TV programmes are broadcast as follows.

For Eastern Europe: D/K

For Western Europe: B/G

- 1 Select a country in Eastern Europe in step 4 of "Auto Channel Set" (pg. 82).
- 2 Press $\triangle \nabla$ to select "TV SYSTEM" in step 5 of "Manual Channel Set" (pg. 83).
- 3 Press $\triangle \nabla$ to select appropriate TV System (D/K or B/G).

Set Stations (A)

Set station names that are registered in your unit.

- 1 Perform steps 1 and 3 of "Manual Channel Set" (pg. 83) to access the Confirmation screen before continuing.
- 2 Press $\triangle \nabla \triangleleft \triangleright$ to select the item you want.
- 3 Press **ENTER** twice to access the Manual Channel Set screen.
- 4 Press $\triangle \nabla$ to select "ID", then press **ENTER**.
- 5 Press $\triangle \nabla$ until the new station's name (ID) you want to store appears, then press **ENTER**. Registered station names (pg. 99) appear as you press $\triangle \nabla$.
- 6 Press $\triangleleft \triangleright$ to select "OK", then press **ENTER**.
 - Repeat steps 2 – 6 as necessary.
- 7 Press **SET UP** twice to close the Confirmation screen.

Set Stations (B)

Set station names other than the ones registered in your unit.

- 1 Perform steps 1 and 3 of "Manual Channel Set" (pg. 83) to access the Confirmation screen and then perform steps 2 and 3 of "Set Stations (A)" above before continuing.
- 2 Press $\triangle \nabla$ to select "ID", then press **ENTER**.
- 3 Press **ENTER** twice.
- 4 Press $\triangleleft \triangleright$ to locate the character insertion point.
- 5 Press $\triangle \nabla$ to cycle through the characters (A–Z, 0–9, –, *, +, _ (space)) and stop when the desired character is indicated, then press \triangleright to enter.
 - Enter the remaining characters the same way (maximum of 4).
- 6 After entering all characters, press $\triangleleft \triangleright$ to select "OK", then press **ENTER**.
- 7 Press **SET UP** twice to close the Confirmation screen.

NOTE:

The characters available for the station name (ID) are A–Z, 0–9, –, *, +, _ (space) (maximum of 4).

Fine-Tuning Channels Already Stored

- 1 Perform steps 1 and 3 of "Manual Channel Set" (pg. 83) to access the Confirmation screen before continuing.
- 2 Press $\triangle \nabla \triangleleft \triangleright$ to select the channel you want to fine-tune, then press **ENTER**.
- 3 Press **ENTER** twice.
- 4 Press **ENTER** to access the Manual Channel Set screen. The Manual Channel Set screen appears.
- 5 Press $\triangle \nabla$ to select "FINE".
- 6 Press $\triangleleft \triangleright$ until the picture appears in its best quality.
 - Repeat steps 2 – 6 as necessary.
- 7 Press **SET UP** three times to close the Confirmation screen.

Clock Set

IMPORTANT:

If you performed Auto Set Up (pg. 17) or Preset Download (pg. 18), without ever having set the clock previously, the unit's built-in clock is also set automatically.

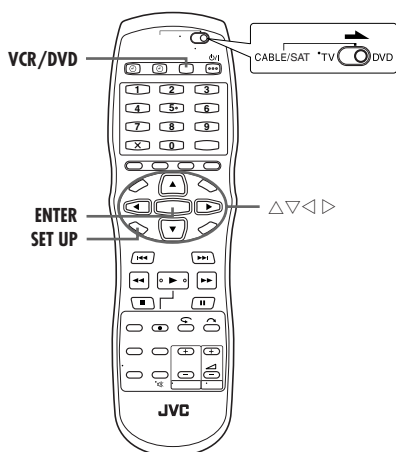
Perform the following steps only if —

— Auto Clock Set has not been performed correctly by Auto Set Up or Preset Download.

OR

— you want to change Just Clock setting. (pg. "Just Clock" in the right column)

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



- 1 Press **SET UP** to access the Main Menu screen.
- 2 Press $\triangleleft \triangleright$ to select "INITIAL SET UP", then press **ENTER**.
- 3 Press $\triangleleft \triangleright$ to select "CLOCK SET", then press **ENTER**.

NOTE:

When you have selected **MAGYARORSZÁG, ČESKÁ REPUBLIKA, POLSKA** or **OTHER EASTERN EUROPE** for the country setting (pg. 17), you cannot use Just Clock function. Skip steps 5 and 6.

- 4 Press $\triangle \nabla$ to select "YEAR", then press **ENTER**. Press $\triangle \nabla$ to set the year, then press **ENTER**.

- Repeat the same procedure to set the date and time. When you set the time, press and hold $\triangle \nabla$ to change the time by 30 minutes.
- When you set the date, press and hold $\triangle \nabla$ to change the date by 15 days.

- 5 Press $\triangle \nabla$ to select "JUST CLOCK", then press **ENTER**. Press $\triangle \nabla$ to set to the desired mode, then press **ENTER**.

- The default setting is "OFF".
- For the Just clock function, refer to "Just Clock" on the right column.
- If you set to "OFF", you can disregard the next step as you won't be able to receive regular clock adjustments.

- 6 Press $\triangle \nabla$ to select "TV PROGRAMME", then press **ENTER**. Press $\triangle \nabla$ to set the channel position to the number representing the station transmitting clock setting data, then press **ENTER**.

- The unit is preset to receive clock setting and adjustment data from channel position 1.

- 7 Press **SET UP** to start the clock operation.

NOTES:

- Just Clock (when set to "ON") adjusts the unit's built-in clock every hour, except for 23:00, 0:00, 1:00 and 2:00.
- Just Clock is not effective when:
 - the unit's power is on.
 - the unit is in the Timer mode.
 - a difference of more than 3 minutes exists between the built-in clock's time and the actual time.
 - the unit is in the Automatic Satellite Programme Recording mode. (pg. 48) (DVD deck only)
 - the unit is in the Power Save mode. (pg. 79)
 - "L-2 SELECT" is set to "SAT VIDEO" or "SAT S-VIDEO". (pg. 72)
- If Just Clock is set to "ON", the unit's clock is automatically adjusted at the start/end of Summer Time.
- Just Clock may not function properly depending on the reception condition.

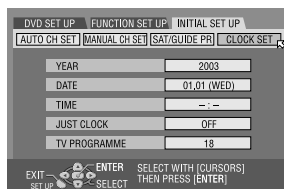
Just Clock

The Just Clock function provides accurate time keeping through automatic adjustments at regular intervals, by reading data from a PDC signal.

The Just Clock option can be set to "ON" or "OFF" at the Clock Set screen (the default setting is "OFF").

IMPORTANT:

If you turn off Just Clock, the accuracy of your unit's built-in clock may be reduced, which could adversely effect timer recording. We recommend you to keep Just Clock on. In cases where the clock setting data from a PDC signal is incorrect, however, you are advised to keep Just Clock set to "OFF".



Format A Disc (DVD Deck Only)



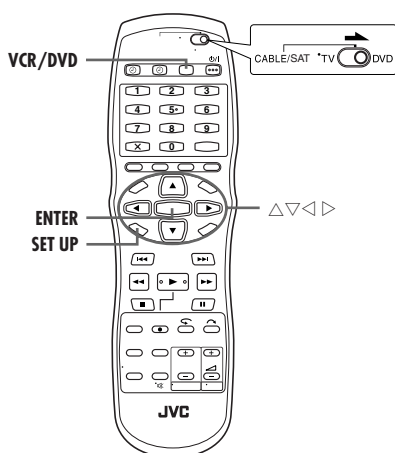
Some DVD-RAM/RW discs are unformatted.

Format the disc when you use an unformatted disc or you want to delete all recordings and data on the disc.

ATTENTION:

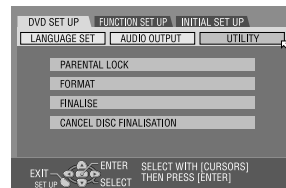
- When a disc is formatted, all recordings and data are erased. It is impossible to restore them.
- Never turn off the unit or disconnect the mains power cord while "NOW FORMATTING..." is displayed on the TV screen.

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.
- Load a DVD-RAM/RW disc to format.



Format A DVD-RAM Disc

- 1 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.
- 2 Press **SET UP** to access the Main Menu screen.
- 3 Press $\Delta \nabla \triangleleft \triangleright$ to select "DVD SET UP", then press **ENTER**.
- 4 Press $\triangleleft \triangleright$ to select "UTILITY", then press **ENTER**.
- 5 Press $\Delta \nabla$ to select "FORMAT", then press **ENTER**. Press $\triangleleft \triangleright$ to select "YES", then press **ENTER** when "DISC WILL BE FORMATTED" appears on the TV screen.
- 6 Press $\triangleleft \triangleright$ to select "OK", then press **ENTER** when "DISC FORMATTING WAS SELECTED" appears on the TV screen.



Format A DVD-RW Disc

- 1 Perform steps 2 to 4 of "Format A DVD-RAM Disc" on the above before continuing.
- 2 Press $\Delta \nabla$ to select "FORMAT", then press **ENTER**. Press $\triangleleft \triangleright$ to choose "VR MODE" or "VIDEO MODE", then press **ENTER** when "DISC WILL BE FORMATTED" appears on the TV screen.
 - "VR MODE": To be chosen when you want to record, erase, or edit data on the disc repeatedly.
 - "VIDEO MODE": To be chosen when you want to erase all the data on the disc once played back to record new data, or play back the disc on other DVD players.
- 3 Press $\triangleleft \triangleright$ to select "YES", then press **ENTER** when "DISC WILL BE FORMATTED IN VR MODE/VIDEO MODE" appears on the TV screen.

NOTES:

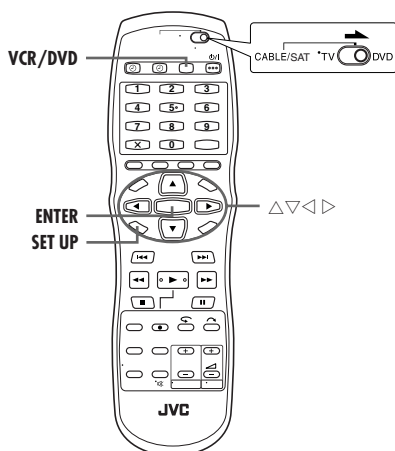
- It is impossible to format Version 1.0 DVD-RW discs in Video mode.
- It is impossible to format DVD-R discs.
- All the programmes on a disc will be deleted once the disc is formatted even if they are protected titles. (pg. 59)

Finalise A Disc (DVD Deck Only)



Finalising DVD-R/RW discs recorded on this unit makes it possible for the discs to be played back on other DVD players. DVD-RW discs are finalised in the mode that the discs were formatted, enabling playback on compatible DVD players. Titles input in the Library Database DVD Navi are registered as titles in the DVD menu. (pg. 59)

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.
- Load a DVD-R/RW disc to finalise.



Before finalising

- It is possible to record on a blank space.
- It is possible to enter a programme title. (pg. 59)
- It is possible to delete programmes. (pg. 59)
- It is impossible to overwrite recorded areas of DVD-R discs.
- Available recording capacity does not increase even if a recorded programme is deleted from a DVD-R disc.
- It is impossible to record or edit DVD-R/RW discs recorded on other devices even if they have not been finalised.

After finalising (For DVD-R/RW (Video mode) discs)

- Video and audio that have been recorded by then are recorded in conformity to the DVD Video standard, enabling you to play back the discs as DVD VIDEO discs.
- Although DVD-R/RW discs finalised on this unit become playable on DVD players compatible with DVD-R/RW discs, some discs still may not play, for which JVC cannot take responsibility.
- Marked points marked before finalising will be deleted, and programmes will be divided automatically into "chapters" approximately every 5 minutes. (pg. 27)
- Depending on the DVD players and DVD-R/RW discs used, and on the conditions of recording, it may not be possible to play back the discs. In this case, play back the discs on this unit.
- Additional recordings become impossible.

Finalise A DVD-R/RW Disc

- 1 Perform steps 2 to 4 of "Format A DVD-RAM Disc" (pg. 86) before continuing.
- 2 Press $\triangle \nabla$ to select "FINALISE", then press **ENTER**. Press $\triangle \nabla$ to select "YES", then press **ENTER** when "DISC WILL BE FINALISED" appears on the TV screen.
- 3 Press $\triangle \nabla$ to select "OK", then press **ENTER** when "FINALISING WILL MAKE DISC READ-ONLY" appears on the TV screen.
- 4 Press **SET UP** to return to the normal screen.
 - Menu screen is cleared.
 - Once a DVD-R/RW (Video mode) disc has been finalised, the displays for original and play list do not appear. Only display for library appears.
 - Once a DVD-RW (VR mode) disc has been finalised, it can be played on DVD players compatible with VR mode.

Cancel The Finalisation Of A DVD-RW Disc

- 1 Load a DVD-RW disc to cancel the disc finalisation, and perform steps 2 to 4 of "Format A DVD-RAM Disc" (pg. 86) before continuing.
- 2 Press $\triangle \nabla$ to select "CANCEL DISC FINALISATION", then press **ENTER**.
- 3 Press $\triangle \nabla$ to select "OK", then press **ENTER** when "CANCEL DISC FINALISATION" appears on the TV screen.
- 4 Press **SET UP** to return to the normal screen.
 - When the disc finalisation is cancelled, the mode in which the disc was formatted is restored, making the disc recordable. (pg. 8, 86)

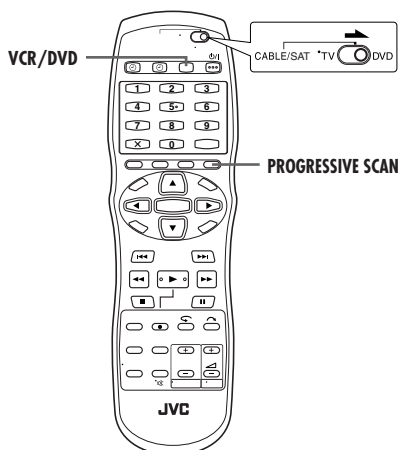
Scan Mode Set

If you connect the unit and TV with Component Video Connection (▶ pg. 16), you can select the scan mode from two modes: Interlaced scan mode which is used in the conventional TV system, and Progressive scan mode which enables reproduction of higher-quality images. For details, refer to "GLOSSARY" (▶ pg. 94).

ATTENTION:

Your TV needs to be compatible with PAL Progressive.

- Turn on the unit.
- Turn on the TV and select the AV mode.
- Slide the **TV/CABLE/SAT/DVD** switch to **DVD**.



1 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.

2 Press **PROGRESSIVE SCAN** for 3 or more seconds.

- Video output indicator (P) lights on the front display panel if Progressive scan mode has been established. (▶ pg. 13)
- Each press of **PROGRESSIVE SCAN** for 3 or more seconds switches the scan mode.

NOTES:

- When the progressive mode is set, be sure to set "L-1 OUTPUT" to "COMPONENT". (▶ pg. 72) Progressive scan is output only from COMPONENT VIDEO OUT connector.
- Interlaced scan mode is the setting at your purchase.
- Interlaced scan mode might be suitable depending on video material.
- Scan mode cannot be set while menu screen is displayed.
- When the Progressive scan mode is engaged, no video signal is output from S-VIDEO OUT connector and L-1 IN/OUT connector.

Watch the image on VCR deck in the Progressive scan mode via component video

- 1 Set the Progressive-compatible TV to the component input mode.
- 2 Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit, then press **PROGRESSIVE SCAN** for 3 or more seconds so that the Video output indicator (P) lights on the front display panel.
- 3 Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.
- 4 Press **VCR→**.
 - "VCR→" lights up on the unit.
- 5 Insert a cassette and press ▶.

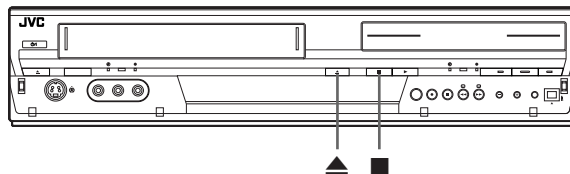
NOTES:

- Be sure to engage the DVD deck in stop mode.
- It is not possible to perform the above steps when the DVD deck is in timer standby mode.
- If the image and sound is distorted, press **VCR/DVD** repeatedly.

Tray Lock (DVD Deck Only)

You can lock the disc tray to prohibit the unwanted disc ejection by children.

- Turn off the unit when the DVD deck is selected.



To lock tray

While the unit is turned off, press and hold ■, then press ▲ on the unit. "LOCKED" appears on the front display panel and the disc tray is locked.

To unlock tray

While the unit is turned off, press and hold ■, then press ▲ on the unit. "UNLOCK" appears on the front display panel.

Before requesting service for a problem, use this chart and see if you can solve the trouble yourself. Small problems are often easily solved, and this can save you the trouble of sending your unit off for repair.

General

No power is supplied to the unit.

- The AC power plug is disconnected from the AC outlet.
- Connect the AC power plug to the AC outlet securely. (ⓘ pg. 16)

The remote control does not work properly.

- Remove the batteries, wait for 5 minutes or more, then load the batteries again.
- The setting of the remote control code is inappropriate.
- Set the same remote control code (1, 2, 3, or 4) on both the unit and the remote control. (ⓘ pg. 74)
- The batteries are discharged.
- Replace the dead batteries with new ones.


Dubbing from the external equipment is not possible.

- The source (another video recorder, camcorder) has not been properly connected.
- Confirm that the source is properly connected.
- All necessary power switches have not been turned on.
- Confirm that all units' power switches are turned on.
- The setting of the input channel position is inappropriate.
- Select the input channel position ("F-1", "L-1", or "L-2") that corresponds to the input terminal connected to the external equipment. (ⓘ pg. 71)
- The record safety tab has been removed when dubbing to the cassette.
- Using adhesive tape, cover the hole where the tab was removed.

The on-screen display superimposed on the programme played back/received on this unit is recorded when you dub the programme to an external recording equipment.

- Set "SUPERIMPOSE" or "O.S.D." to "OFF". (ⓘ pg. 79, 80)

The unit does not operate.

- There are cases when the operation is prohibited on the disc.
- Lightning or static electricity may cause malfunction of the unit.
- Press  to turn the power off, then press the button again to turn the power on.

Playback (DVD Deck)

The DVD deck can not be operated.

- The DVD deck is not selected.
- Press **VCR/DVD** repeatedly so that the DVD lamp lights up on the unit.

Images do not appear on the TV screen.

- The TV is not set to the AV mode.
- Set the TV to the AV mode.
- When interlace scanned programme is played back, progressive scan mode is selected.
- Press and hold **PROGRESSIVE SCAN** until **P** disappears from the front display panel.

Playback does not start or stop immediately after playback is started by pressing . On the front display panel, "NO DISC" appears.

- The disc is loaded upside down.
- Place the disc on the disc tray with the playback surface facing downward. (ⓘ pg. 9)
- A disc not being compatible with the unit is loaded.
- Load a playable disc on the unit. (ⓘ pg. 6)
- A dirty disc is loaded.
- Clean the disc. (ⓘ pg. 10)
- Defective disc is loaded.
- Replace the warped or scratched disc with a normal one.

Images are blurred or distorted when you start High-Speed Search.

- Images are blurred or distorted at the point where the playback speed changes and this is not a malfunction of the unit.

Playback does not start.

- Playback does not start for approximately 30 seconds after recording is stopped and this is not a malfunction of the unit.

Playback does not start when you select a title or a chapter.

- The Parental Lock is engaged and the disc is rated higher than the set level.
- Release the Parental Lock temporarily or change the set level. (ⓘ pg. 39)

Playback (VCR Deck)

The VCR deck can not be operated.

- The VCR deck is not selected.
- Press **VCR/DVD** repeatedly so that the VCR lamp lights up on the unit.

The tape will not rewind or fast-forward.

- The tape is already fully rewound or fast-forwarded.
- Check the cassette.

The playback picture does not appear while the tape is running.

- The TV is not set to the AV mode.
- Set the TV to the AV mode.

Noise appears during visual search.

- This is normal.

Noise appears during normal playback.

- The automatic tracking mode is engaged.
- Try manual tracking. (🔍 pg. 51)

The playback picture is blurred or interrupted while TV broadcasts are clear or "USE CLEANING CASSETTE" message appears on the screen.

- The video heads may be dirty.
- Use a dry cleaning cassette ECL-3F, or consult your JVC dealer.

Breaks are noticeable in Hi-Fi soundtrack.

- The automatic tracking mode is engaged.
- Try manual tracking. (🔍 pg. 51)

Recording (DVD Deck)

The desired programme cannot be recorded.

- The channel position does not correspond to that in the receiving area.
- Set the correct channel position for the receiving broadcast. (🔍 pg. 83)

Recording cannot be made.

- No disc or a disc not being compatible with the unit is loaded.
- Load a recordable disc on the unit. (🔍 pg. 6)
- The disc loaded is not formatted.
- Format the disc. (🔍 pg. 86)
- A finalised DVD-R disc is loaded.
- Recording cannot be made on finalised discs. Load a recordable disc on the unit.
- The disc is full or does not have enough space for the programme to be recorded.
- Clear unnecessary programmes on the disc or load a blank disc. (🔍 pg. 59)

Recording (VCR Deck)

During recording, the tape does not run. The VCR recording lamp lights up on the front display panel.

- The unit is in the Record Pause mode.
- Press ▶ to resume recording.

Recording cannot be made.

- There is no cassette loaded, or the cassette loaded has had its record safety tab removed.
- Insert a cassette, or using adhesive tape, cover the hole where the tab was removed.

TV broadcasts cannot be recorded.

- "L-1", "L-2" or "F-1" has been selected as the input mode.
- Select the desired channel.

Camcorder recording is not possible.

- The camcorder has not been properly connected.
- Confirm that the camcorder is properly connected.
- The input mode is not correct.
- Set the input mode to "F-1".

The tape is automatically rewound, then the unit is shut off.

- The end of the tape was reached during recording.
- The programme may not have been recorded in its entirety. Next time make sure you have enough time on the tape to record the entire programme.

Timer Recording (DVD Deck)

Timer programming cannot be made.

- Date and time is not correct.
→ Set date and time correctly. (🔧 pg. 85)
- The timer is not engaged.
→ Press **DVD TIMER** (⌚) and confirm that the DVD timer lamp lights up on the unit.
- Timer recording is in progress.
→ Timer programming can't be performed while a timer recording is in progress. Wait until it finishes.

Timer programming recording does not start.

- Date and time is not correct.
→ Set date and time correctly. (🔧 pg. 85)
- The timer is not engaged.
→ Press **DVD TIMER** (⌚) and confirm that the DVD timer lamp lights up on the unit.
- There is a power outage while the DVD deck is in the timer standby mode.
→ The unit does not enter timer standby mode automatically when the power is restored to the unit. Engage the timer standby mode again.

SHOWVIEW Timer Programming cannot be made.

- Date and time set on the unit is not correct.
→ Set date and time correctly. (🔧 pg. 85)
- The channel position does not correspond to that in the receiving area.
→ Set the correct channel position for the receiving broadcast. (🔧 pg. 82)

Automatic Satellite Programme Recording does not start.

- The satellite receiver is not connected properly to this unit.
→ Connect the satellite receiver to the L-2 IN/DECODER connector properly. (🔧 pg. 48)

On the front display panel, “-:-:-” appears.

- Power failure occurred.
→ Set date and time correctly. (🔧 pg. 85)

“PROGRAM FULL” appears on the TV screen during timer programming.

- Eight programmes have already been timer programmed.
→ Clear unnecessary programmes on the unit, then try timer programming again. (🔧 pg. 47)

The disc space does not increase when recorded programmes are cleared.

- The PC's data recorded on a DVD-RAM drive cannot be cleared on this unit.
→ Format the disc. (When the disc is soiled, wipe the disc with a soft dry cloth before formatting.) (🔧 pg. 10, 86)

Timer Recording (VCR Deck)

Timer programming cannot be made.

- Date and time is not correct.
→ Set date and time correctly. (🔧 pg. 85)
- The timer is not engaged.
→ Press **VCR TIMER** (⌚) and confirm that the VCR timer lamp lights up on the unit.
- Timer recording is in progress.
→ Timer programming can't be performed while a timer recording is in progress. Wait until it finishes.

Timer programming recording does not start.

- Date and time is not correct.
→ Set date and time correctly. (🔧 pg. 85)
- The timer is not engaged.
→ Press **VCR TIMER** (⌚) and confirm that the VCR timer lamp lights up on the unit.

The VCR Timer lamp on the unit won't stop blinking.

- The timer is engaged but there's no cassette loaded.
→ Load a cassette with the record safety tab intact.
- The loaded cassette has had its record safety tab removed.
→ Remove the cassette and cover the hole with adhesive tape, or insert a cassette with the record safety tab intact.

The tape is automatically ejected, then the unit is shut off.

- The end of the tape was reached during timer recording.
→ The programme may not have been recorded in its entirety. Next time make sure you have enough time on the tape to record the entire programme.
- The end of the tape was reached during Instant Timer Recording.
→ The programme may not have been recorded in its entirety. Next time make sure you have enough time on the tape to record the entire programme.

SHOWVIEW Timer Programming cannot be made.

- Date and time set on the unit is not correct.
→ Set date and time correctly. (🔧 pg. 85)
- The channel position does not correspond to that in the receiving area.
→ Set the correct channel position for the receiving broadcast. (🔧 pg. 83)

The SHOWVIEW system does not timer-record properly.

- The unit's channel positions have been set incorrectly.
→ Refer to “SHOWVIEW” System Setup” (🔧 pg. 82) and re-perform the procedure.

Initialising (DVD Deck Only)

Malfunction occurs on the unit.

- Press ϕ/I to turn off the unit, press and hold ϕ/I , then press \blacksquare for two seconds or more.

Other Problems

The image of the TV broadcast appears distorted on the TV screen.

For RF/AV/S-VIDEO connection

- Press **PROGRESSIVE SCAN** for 3 or more seconds so that the Video output indicator (**P**) lights off on the front display panel.

For component video connection

- Press **PROGRESSIVE SCAN** for 3 or more seconds so that the Video output indicator (**P**) lights up on the front display panel.

Whistling or howling is heard from the TV during camcorder recording.

- The camcorder's microphone is too close to the TV.
→ Position the camcorder so its microphone is away from the TV.
- The TV's volume is too high.
→ Turn the TV's volume down.

When scanning channels, some of them are skipped over.

- Those channels have been designated to be skipped.
→ If you need the skipped channels, restore them. (pg. 83)

The channel cannot be changed.

- Recording or Live Memory recording* is in progress.
→ Press **II** to pause recording, change the channel, then press **▶** to resume recording.
- * DVD deck only

Channel settings that were made manually seem to have changed or disappeared.

- After the manual settings were made, Auto Channel Set was performed.
→ Perform "Clock Set" (pg. 85).

On-screen Message (DVD Deck Only)

MEMORY IS FULL NOTHING MORE CAN BE REGISTERED IN THE LIBRARY IF YOU DELETE UNNECESSARY TITLE INFORMATION, YOU CAN THEN REGISTER ADDITIONAL INFORMATION

- The memory is full for registration for the Navigation system. The recording cannot be started even though the capacity for the recording is enough. (pg. 63)

AVAILABLE MEMORY IS LOW SOON YOU WILL NO LONGER BE ABLE TO REGISTER INFORMATION IN THE LIBRARY IF YOU DELETE UNNECESSARY TITLE INFORMATION, YOU CAN THEN REGISTER ADDITIONAL INFORMATION

- The remaining capacity of the memory is not enough for registration for the Navigation system. The recording cannot be started even though the capacity for the recording is enough. (pg. 63)

DISC NOT REGISTERED IN THE LIBRARY REGISTER DISC?

- A disc that is not registered in the library has been inserted.
Register the disc as necessary. (pg. 63)

INSERT DISC #XXXX

- Appears when a title that has been selected in the library is not contained in the loaded disc.

CAN NOT RECORD OR MAKE PLAY LIST DELETE UNWANTED TITLES

- Recording and/or editing cannot be performed with a loaded DVD-RAM disc.
- The number of titles exceeds 99.
- The number of play lists exceeds 999.

SET CLOCK BEFORE TIMER PROGRAMMING

- To set the timer programme, the clock must be set in advance. (pg. 85)

PROGRAMME FULL DELETE UNWANTED TIMER PROGRAMME

- You can programme this unit to timer-record as many as 8 programmes. To programme more, you need to cancel a timer programme already set. (pg. 47)

CAN NOT SET DISC TIMER PROGRAMMING WITH THIS DISC PREPARE A FORMATTED DISC AS DESCRIBED BELOW DVD-RAM DVD-RW (VR MODE)

- On-Disc Timer Programming has been attempted when a disc that is not compatible with the function is loaded. (pg. 45)

NO DISC INSERTED

- On-Disc Timer Programming has been attempted when a disc is not loaded, or loaded upside down. (pg. 9, 45)

DISC NOT RECORDABLE INSERT RECORDABLE DISC

- When a playback-only disc or a finalised disc is loaded, \bullet has been pressed. (pg. 6)

SHOWVIEW NO. ERROR CONFIRM SHOWVIEW NO. THEN RETRY

- An invalid SHOWVIEW number has been input. (🔧 pg. 43)

GUIDE PROGRAMME IS NOT SET SELECT CHANNEL YOU WANT TO RECORD

- To set the timer programme using the SHOWVIEW system, the Guide Program number must be set in advance. (🔧 pg. 82)

CAN NOT SET SHOWVIEW TIMER PROGRAMMING DURING TIMER RECORDING OR INSTANT TIMER RECORDING CANCEL TIMER RECORDING OR INSTANT TIMER RECORDING, THEN ENTER THE SHOWVIEW NO. AGAIN

- Appears when you tried to input a SHOWVIEW number during timer recording or instant timer recording.

REGION CODE ERROR CHECK DISC

- A disc loaded cannot be played back on this unit since the region number of the disc does not match that of the unit. (🔧 pg. 7)

UNREADABLE DISC CHECK DISC

- When an incompatible disc is loaded, ► has been pressed. (🔧 pg. 7)

COULD NOT FORMAT THE DISC CHECK THE DISC

- Formatting is not complete since the disc may be dirty or damaged. Take out the disc, clean it and retry. (🔧 pg. 10, 86)

COULD NOT FINALISE THE DISC CHECK THE DISC

- Finalising is not complete since the disc may be dirty or damaged. Take out the disc, clean it and retry. (🔧 pg. 10, 87)

COULD NOT CANCEL DISC FINALISATION CHECK THE DISC

- Cancelling disc finalisation is not complete since the disc may be dirty or damaged. Take out the disc, clean it and retry. (🔧 pg. 10, 87)

PRESS [STOP] AGAIN TO STOP RECORDING

- During Live Memory playback, ■ has been pressed. (🔧 pg. 32)

TIMER RECORDING COMPLETED

- Timer recording has finished during Live Memory playback.

PLAYBACK WILL STOP THEN TIMER RECORDING WILL START

- Timer recording finished during Live Memory playback, then the next timer recording is about to begin while playback continues.

COPY PROHIBITED CAN NOT RECORD

- An attempt has been made to record copy-protected contents.
- An attempt has been made to record copy-once contents on a disc that is not CPRM compatible, such as DVD-R.

COPY PROHIBITED CAN NOT PLAY

- The unit has detected invalid contents at the start or in the middle of playback.

THE i.LINK DEVICE THAT YOU HAVE CONNECTED IS NOT RECOGNIZED MAKE SURE THAT THE DEVICE IS CONNECTED PROPERLY AND POWERED ON

- An attempt has been made to start DV dubbing when a digital video camera is not properly connected to the unit.
- Check the connection. (🔧 pg. 69)

■ Aspect ratio

The ratio of vertical and horizontal sizes of a displayed image. The horizontal vs. vertical ratio of conventional TVs is 4:3, and that of wide-screens is 16:9.

■ Chapter

Refers to individual chapters included in a title.

■ Composite video signal

Refers to video signal comprised of three kinds of signals combined: an image signal made up of luminance and chrominance signals using the frequency multiplication technique; burst signal providing the basis for colour reproduction; and synchronization signal.

■ Component video signal

A video signal system where parts of information necessary for reproducing image signal comprised of the three primary colors of light are transmitted via separate signal lines. Types of signal, such as R/G/B, Y/Pb/Pr, etc., are available.

■ Disc menu

A screen display prepared for allowing selection of images, sounds, subtitles, multiangles, etc. recorded on a DVD disc.

■ Dolby Digital (AC-3)

A six-channel system consisting of left, centre, right, left rear, right rear and LFE (Low-Frequency Effect channel, for use with a subwoofer) channels. All processing is done in the digital domain. Not all Dolby Digital discs contain six (5.1) channels of information.

■ Down-mix

Internal stereo mix of multichannel surround audio by a DVD player. The down-mix signals are output from stereo output connectors.

■ DTS

A Digital Surround audio encoding format configured with six (5.1) channels, similar to Dolby Digital. It requires a decoder, either in the player or in an external receiver. DTS stands for Digital Theater Systems.

Not all DTS discs contain six (5.1) channels of information.

■ Interlaced scan

In the conventional video system, a picture is shown on the display monitor in two halves. The Interlaced scan system places lines of the second half of the picture in-between lines of the first half of the picture.

■ JPEG

A still-picture data compression system proposed by the Joint Photographic Expert Group, which features small decrease in image quality in spite of its high compression ratio.

■ Letter box

A method of displaying wide images like movies in the centre of a 4:3 TV screen with no part of the image deleted, by placing black bands on the top and bottom of the screen. This name has resulted from the screen form looking literally like a letter box.

■ Linear PCM (PCM: Pulse Code Modulation)

A system for converting analog sound signal to digital signal for later processing, with no data compression used in conversion.

■ MP3

A file format with a sound data compression system. "MP3" is the abbreviation of Motion Picture Experts Group 1 (or MPEG-1) Audio Layer 3. By using MP3 format, one CD-R/RW can contain about 10 times as much data volume as a regular CD can.

■ MPEG

A family of Standards for compressing audio-visual information. "MPEG" standards include MPEG-1, MPEG-2 and MPEG-4. Video CD and MP3 are based on MPEG-1, while DVD is based on MPEG-2. MPEG stands for Moving Picture coding Experts Group.

■ Multiangle

By recording multiple scenes progressing at the same time in a single title, the user can select view angles. This feature is called the multiangle function.

■ Multichannel

DVD is specified to have each sound track constitute one sound field. Multichannel refers to a structure of sound tracks having three or more channels.

■ Multilanguage

When a title is created to cope with multiple languages, it is generally called a multilanguage title.

■ NTSC (National television system committee)

A black and white and colour television system format used in the U.S.A., Canada, Mexico and Japan.

■ PAL (Phase Alternation by Line)

A colour television system format used extensively in Western Europe.

■ Parental Lock

A feature of this system to automatically determine whether or not to reproduce particular DVD software by comparing its parental lock level (a measure of undesirability of scenes, etc. from educational viewpoint) set for the software beforehand with that set on this system by the user; if the software's level is less restrictive than the user-set level, it will be reproduced.

■ Playback control (PBC)

Refers to the signal recorded on Video CD/SVCD for controlling reproduction. By using menu screens recorded on a Video CD/SVCD that supports PBC, you can enjoy interactive-type software as well as software having a search function.

■ Progressive scan

Progressive scan displays all the horizontal lines of a picture at one time, as a single frame. This system can convert the interlaced video from DVD into progressive format for connection to a progressive display. It dramatically increases the vertical resolution.

■ Region Code

A system for allowing discs to be played back only in the regions designated beforehand. All the countries in the world are grouped into six regions, each region being identified by a specified Region Code (or region number). If the Region Code given to a disc includes a numeral which matches one in the Region Code of a player, the player can play back the disc.

■ Sampling frequency

Frequency of sampling data when analog data is converted to digital data. Sampling frequency numerically represents how many times the original analog signal is sampled per second.

■ Surround

A system for creating three-dimensional sound fields full of realism by arranging multiple speakers around the listener.

■ Transfer rate

The rate of transferring digital data. Usually the measure is in baud per second. The DVD system applies a variable transfer rate system for high efficiency.

GENERAL**Power requirement**

AC 220 V – 240 V~, 50/60 Hz

Power consumption

Power on: 42 W

Power off: 23.5 W

Temperature

Operating: 5°C to 35°C

Storage: –20°C to 60°C

Operating position

Horizontal only

Dimensions (WxHxD)

435 mm x 96 mm x 347 mm

Weight

6.3 kg

VIDEO/AUDIO (DVD Deck)**Recording format**

DVD-RAM: DVD Video Recording format

DVD-R: DVD-Video format

DVD-RW: DVD-Video format, DVD Video Recording format

Recording time

Maximum 8 hours (with 4.7 GB disc)

(XP): Approx. 1 hour

(SP): Approx. 2 hours

(LP): Approx. 4 hours

(EP): Approx. 6 hours

(FR): Approx. 1 hour – 8 hours

Audio recording system

Dolby Digital (2 ch)

Linear PCM (XP mode only)

Video recording compression system

MPEG2 (CBR/VBR)

Input/Output

S-video input:

Y: 0.8 – 1.2 Vp-p, 75 ohms

C: 0.2 – 0.4 Vp-p, 75 ohms

S-video output:

Y: 1.0 Vp-p, 75 ohms

C: 0.3 Vp-p, 75 ohms

Video input: 0.5 – 2.0 Vp-p, 75 ohms (pin jack)

Video output: 1.0 Vp-p, 75 ohms (pin jack)

Audio input:

–8 dB, 50 kilohms (pin jack)

Corresponding to mono (left)

Audio output: –8 dB, 1 kilohms (pin jack)

i.Link: 4-pin for DV input

Component video output:

Y: 1.0 Vp-p, 75 ohms

CB/CR, PB/PR: 0.7 Vp-p, 75 ohms

Corresponding to copy protection

Digital audio output:

Optical: –18 dBm, 660 nm

Coaxial: 0.7 Vp-p, 75 ohms

Corresponding to Dolby Digital and DTS Digital Surround

Bit stream

Selectable in digital audio output setting menu

VIDEO/AUDIO (VCR Deck)**Signal system**

PAL color signal and CCIR monochrome signal, 625 lines/50 fields

Recording system

DA4 (Double Azimuth) head helical scan system

Format

VHS PAL standard

Maximum recording time

(SP): 240 min. with E-240 video cassette

(LP): 480 min. with E-240 video cassette

Signal-to-noise ratio

45 dB

Horizontal resolution

230 lines

Frequency range

(Normal audio): 70 Hz to 10,000 Hz

(Hi-Fi audio): 20 Hz to 20,000 Hz

Input/Output

RCA connectors: IN x 1, OUT x 1

Specifications shown are for SP mode unless otherwise specified.

TUNER/TIMER**TV channel storage capacity**

99 positions (+AUX position)

Tuning system

Frequency synthesised tuner

Channel coverage

VHF 47 MHz – 89 MHz/

104 MHz – 300 MHz/

302 MHz – 470 MHz

UHF 470 MHz – 862 MHz

Memory backup time

Approx. 60 minutes

ACCESSORIES**Provided accessories**

RF cable,

21-pin SCART cable,

Satellite Controller,

Infrared remote control unit,

“R6” battery x 2

E. & O.E. Design and specifications subject to change without notice.

ATTENTION:

This unit contains microcomputers. External electronic noise or interference could cause malfunctioning. In such cases, switch the unit off and unplug the mains power cord. Then plug it in again and turn the unit on. Take out the disc. After checking the disc, operate the unit as usual.

Language Code List

AA	Afar	IK	Inupiak	RN	Kirundi
AB	Abkhazian	IN	Indonesian	RO	Rumanian
AF	Afrikaans	IS	Icelandic	RU	Russian
AM	Ameharic	IW	Hebrew	RW	Kinyarwanda
AR	Arabic	JI	Yiddish	SA	Sanskrit
AS	Assamese	JW	Javanese	SD	Sindhi
AY	Aymara	KA	Georgian	SG	Sangho
AZ	Azerbaijani	KK	Kazakh	SH	Serbo-Croatian
BA	Bashkir	KL	Greenlandic	SI	Singhalese
BE	Byelorussian	KM	Cambodian	SK	Slovak
BG	Bulgarian	KN	Kannada	SL	Slovenian
BH	Bihari	KO	Korean (KOR)	SM	Samoan
BI	Bislama	KS	Kashmiri	SN	Shona
BN	Bengali, Bangla	KU	Kurdish	SO	Somali
BO	Tibetan	KY	Kirghiz	SQ	Albanian
BR	Breton	LA	Latin	SR	Serbian
CA	Catalan	LN	Lingala	SS	Siswati
CO	Corsican	LO	Laothian	ST	Sesotho
CS	Czech	LT	Lithuanian	SU	Sundanese
CY	Welsh	LV	Latvian, Lettish	SW	Swahili
DZ	Bhutani	MG	Malagasy	TA	Tamil
EL	Greek	MI	Maori	TE	Telugu
EO	Esperanto	MK	Macedonian	TG	Tajik
ET	Estonian	ML	Malayalam	TH	Thai
EU	Basque	MN	Mongolian	TI	Tigrinya
FA	Persian	MO	Moldavian	TK	Turkmen
FJ	Fiji	MR	Marathi	TL	Tagalog
FO	Faroese	MS	Malay (MAY)	TN	Setswana
FY	Frisian	MT	Maltese	TO	Tonga
GA	Irish	MY	Burmese	TR	Turkish
GD	Scots Gaelic	NA	Nauru	TS	Tsonga
GL	Galician	NE	Nepali	TT	Tatar
GN	Guarani	OC	Occitan	TW	Twi
GU	Gujarati	OM	(Afan) Oromo	UK	Ukrainian
HA	Hausa	OR	Oriya	UR	Urdu
HI	Hindi	PA	Panjabi	UZ	Uzbek
HR	Croatian	PL	Polish	VI	Vietnamese
HU	Hungarian	PS	Pashto, Pushto	VO	Volapuk
HY	Armenian	PT	Portuguese	WO	Wolof
IA	Interlingua	QU	Quechua	XH	Xhosa
IE	Interlingue	RM	Rhaeto-Romance	YO	Yoruba
				ZU	Zulu

Country/Area Code List for Parental Lock

AD	Andorra	CK	Cook Islands	GN	Guinea
AE	United Arab Emirates	CL	Chile	GP	Guadeloupe
AF	Afghanistan	CM	Cameroon	GQ	Equatorial Guinea
AG	Antigua and Barbuda	CN	China	GR	Greece
AI	Anguilla	CO	Colombia	GS	South Georgia and the South Sandwich Islands
AL	Albania	CR	Costa Rica	GT	Guatemala
AM	Armenia	CU	Cuba	GU	Guam
AN	Netherlands Antilles	CV	Cape Verde	GW	Guinea-Bissau
AO	Angola	CX	Christmas Island	GY	Guyana
AQ	Antarctica	CY	Cyprus	HK	Hong Kong
AR	Argentina	CZ	Czech Republic	HM	Heard Island and McDonald Islands
AS	American Samoa	DE	Germany	HN	Honduras
AT	Austria	DJ	Djibouti	HR	Croatia
AU	Australia	DK	Denmark	HT	Haiti
AW	Aruba	DM	Dominica	HU	Hungary
AZ	Azerbaijan	DO	Dominican Republic	ID	Indonesia
BA	Bosnia and Herzegovina	DZ	Algeria	IE	Ireland
BB	Barbados	EC	Ecuador	IL	Israel
BD	Bangladesh	EE	Estonia	IN	India
BE	Belgium	EG	Egypt	IO	British Indian Ocean Territory
BF	Burkina Faso	EH	Western Sahara	IQ	Iraq
BG	Bulgaria	ER	Eritrea	IR	Iran (Islamic Republic of)
BH	Bahrain	ES	Spain	IS	Iceland
BI	Burundi	ET	Ethiopia	IT	Italy
BJ	Benin	FI	Finland	JM	Jamaica
BM	Bermuda	FJ	Fiji	JO	Jordan
BN	Brunei Darussalam	FK	Falkland Islands (Malvinas)	JP	Japan
BO	Bolivia	FM	Micronesia (Federated States of)	KE	Kenya
BR	Brazil	FO	Faroe Islands	KG	Kyrgyzstan
BS	Bahamas	FR	France	KH	Cambodia
BT	Bhutan	FX	France, Metropolitan	KI	Kiribati
BV	Bouvet Island	GA	Gabon	KM	Comoros
BW	Botswana	GB	United Kingdom	KN	Saint Kitts and Nevis
BY	Belarus	GD	Grenada	KP	Korea, Democratic People's Republic of
BZ	Belize	GE	Georgia	KR	Korea, Republic of
CA	Canada	GF	French Guiana	KW	Kuwait
CC	Cocos (Keeling) Islands	GH	Ghana	KY	Cayman Islands
CF	Central African Republic	GI	Gibraltar	KZ	Kazakhstan
CG	Congo	GL	Greenland	LA	Lao People's Democratic Republic
CH	Switzerland	GM	Gambia	LB	Lebanon
CI	Côte d'Ivoire				

LC	Saint Lucia	NU	Niue	SZ	Swaziland
LI	Liechtenstein	NZ	New Zealand	TC	Turks and Caicos Islands
LK	Sri Lanka	OM	Oman	TD	Chad
LR	Liberia	PA	Panama	TF	French Southern Territories
LS	Lesotho	PE	Peru	TG	Togo
LT	Lithuania	PF	French Polynesia	TH	Thailand
LU	Luxembourg	PG	Papua New Guinea	TJ	Tajikistan
LV	Latvia	PH	Philippines	TK	Tokelau
LY	Libyan Arab Jamahiriya	PK	Pakistan	TM	Turkmenistan
MA	Morocco	PL	Poland	TN	Tunisia
MC	Monaco	PM	Saint Pierre and Miquelon	TO	Tonga
MD	Moldova, Republic of	PN	Pitcairn	TP	East Timor
MG	Madagascar	PR	Puerto Rico	TR	Turkey
MH	Marshall Islands	PT	Portugal	TT	Trinidad and Tobago
ML	Mali	PW	Palau	TV	Tuvalu
MM	Myanmar	PY	Paraguay	TW	Taiwan, Province of China
MN	Mongolia	QA	Qatar	TZ	Tanzania, United Republic of
MO	Macau	RE	Réunion	UA	Ukraine
MP	Northern Mariana Islands	RO	Romania	UG	Uganda
MQ	Martinique	RU	Russian Federation	UM	United States Minor Outlying Islands
MR	Mauritania	RW	Rwanda	US	United States
MS	Montserrat	SA	Saudi Arabia	UY	Uruguay
MT	Malta	SB	Solomon Islands	UZ	Uzbekistan
MU	Mauritius	SC	Seychelles	VA	Vatican City State (Holy See)
MV	Maldives	SD	Sudan	VC	Saint Vincent and the Grenadines
MW	Malawi	SE	Sweden	VE	Venezuela
MX	Mexico	SG	Singapore	VG	Virgin Islands (British)
MY	Malaysia	SH	Saint Helena	VI	Virgin Islands (U.S.)
MZ	Mozambique	SI	Slovenia	VN	Viet Nam
NA	Namibia	SJ	Svalbard and Jan Mayen	VU	Vanuatu
NC	New Caledonia	SK	Slovakia	WF	Wallis and Futuna Islands
NE	Niger	SL	Sierra Leone	WS	Samoa
NF	Norfolk Island	SM	San Marino	YE	Yemen
NG	Nigeria	SN	Senegal	YT	Mayotte
NI	Nicaragua	SO	Somalia	YU	Yugoslavia
NL	Netherlands	SR	Suriname	ZA	South Africa
NO	Norway	ST	Sao Tome and Principe	ZM	Zambia
NP	Nepal	SV	El Salvador	ZR	Zaire
NR	Nauru	SY	Syrian Arab Republic	ZW	Zimbabwe

TV Station And ID List

The "ID" abbreviation is what is shown on-screen in lieu of the station name. The "ID" abbreviation is listed in the Confirmation screen and is displayed on the TV screen when the unit is tuned to a different station.

ID*	STATION NAME
1000	TV1000
3SAT	3SAT
9LIV	9LIVE
AB3	AB3
ADLT	ADULT
ANIM	ANIMAL PLANET
ANT3	ANTENA3
ARD	ARD
ARTE	ARTE
ATV	MAGYAR ATV
B1	BERLIN 1
BBC	BBC GROUP
BBC1	BBC1
BBC2	BBC2
BBCW	BBC WORLD
BIO+	TV BIO+
BLOO	BLOOMBERG
BR3	BAYERN3
C+	CANAL PLUS
C1	PORTUGUESES
C9	VALENCIA
CAN5	CANALE5
CANV	KETNET CANVAS
CANZ	KANAAL Z
CH4	CHANNEL4
CH5	CHANNEL5
CHLD	CHILD
CINE	CINEMA
CLUB	TELECLUB
CMT	CMT
CNN	CNN
CSUR	ANDALUCIA
CT1	CT 1
CT2	CT 2
DISC	DISCOVERY
DK1	DENMARK1
DK2	DENMARK2
DK4	DENMARK4
DR1	DR TV
DR2	DR2
DSF	DSF
DUNA	DUNA TV
ETB1	ETB1
ETB2	ETB2
ETV	ETV
EUNW	EURO NEWS
EURO	EURONEWS
EUSP	EUROSPORTS
FEMM	FEMMAN
FILM	FILM
FNET	FILMNET
FR2	France2
FR3	France3
FR5	France5
GALA	GALAVISION
HBO	HBO
HR3	HESSEN3
HSEU	H.S.EURO
INFO	INFO-KANAL
ITA1	ITALIA1
ITA7	ITALIA7
ITV1	ITV

ID*	STATION NAME
JIM	JIM TV
JSTV	JSTV
KA2	KA2
KAB1	KABEL1
KAN2	KANAL2
KAN5	KANAL5
KBH	KBH.KANAL
KIKA	KINDER.KANAL
LA7	LA7
LIB	LIBERTY TV
LOCA	LOCAL
M6	M6
MBC	MBR
MCM	MCM
MDR	MDR
MOVE	MOVIE
MTV	MTV
MTV1	MTV1
MTV2	MTV2
MTV3	MTV3
NGEO	NATIONAL.G
N24	NEWS24
N3	NORD3
N-TV	N-TV
NBC	NBC SUPER
NDR	NDR
NED1	NED1
NED2	NED2
NED3	NED3
NET5	NETWORK5
NEWS	
NICK	NICKELODEON
NOVA	NOVA
NRK1	NRK
NRK2	NRK2
ODE	ODEON
ORF1	ORF1
ORF2	ORF2
PHOE	PHOENIX
POLS	POL SAT
PREM	PREMIERE
PRIM	PRIMA TV
PRO7	PRO7
RAI1	RAI1
RAI2	RAI2
RAI3	RAI3
RET4	RETE4
RTB1	TELE21
RTB2	RTBF1 or 2
RTL	RTL
RTL2	RTL2
RTL4	RTL4
RTL5	RTL5
RTL7	RTL7
RTLK	RTLK
RTP	RTP
RTV4	RTV4
SAT1	SAT1
SBS6	SBS
SERV	Service
SF1	SF1
SF2	SF2

ID*	STATION NAME
SHOW	SHOW
SIC	SOCIEDADE
SKY	SKY CHANNEL
SKYN	SKY NEWS
SPEK	SPEKTRUM
SPRT	SPORT
SRTL	SUPER RTL
STAR	STAR-TV
SVT1	SVT1
SVT2	SVT2
SV24	NEWS
SWR	SUEDWEST3
TCC	TCC
TCM	TCM
TELE	TELE
TELE5	TELE5
TF1	TF1
TM	TV DE MADRID
TMC	TELEMONTECARLO
TMF	TMF
TNT	TNT INT
TRT	TRT INT
TSI1	TSI
TSI2	TSI2
TSR1	TSR
TSR2	TSR2
TV1	BRTN TV1
TV2	TV2
TV2Z	TV2 ZULU
TV3	TV3
TV3+	TV3 PLUS
TV4	TV4
TV5	TV5
TV6	TV6
TV8	TV8
TVE1	TVE1
TVE2	TVE2
TVG	TV GALICIA
TVI	TV INDEPENDENT
TVN	TV NORGE
TV24	TVN24
TVP1	TVP1
TVP2	TVP2
TV P	TV POLONIA
V8	V8
VCR	VIDEO
VH-1	VH-1
VIT	VITAYA
VIVA	VIVA
VIV2	VIVA2
VMTV	VIDEO MUSIC
VOX	VOX
VSAT	VIASAT3
VT4	VT4
VTM	VTM
WDR3	West3
WRLD	WORLD
YLE1	YLE1
YLE2	YLE2
YORN	YORIN
ZDF	ZDF
ZTV	ZTV

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EN

DR-MV1S/DR-MV1B



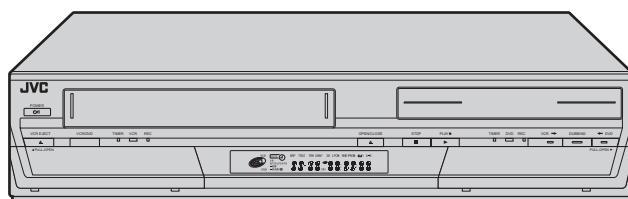
JVC

SCHEMATIC DIAGRAMS

DVD VIDEO RECORDER & VIDEO CASSETTE RECORDER

**DR-MV1BEK, DR-MV1BEU,
DR-MV1SEF, DR-MV1SEK,
DR-MV1SEU**

CD-ROM No.SML200407



DR-MV1BEK, DR-MV1BEU, DR-MV1SEF,
DR-MV1SEK, DR-MV1SEU [D3RV21]




For disassembling and assembling of MECHANISM ASSEMBLY, refer to the SERVICE MANUAL No.86700(MECHANISM ASSEMBLY).

CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions

The Components identified by the symbol  are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

1. Units of components on the schematic diagram

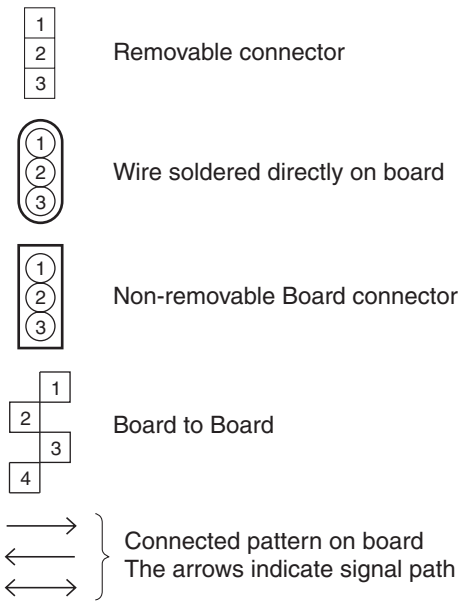
- Unless otherwise specified.
- 1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).
Chip resistors are 1/16 W.
K: KΩ(1000Ω), M: MΩ (1000KΩ)
 - 2) All capacitance values are in μF, (P: PF).
 - 3) All inductance values are in μH, (m: mH).
 - 4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

Note: The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

2. Indications of control voltage

- AUX : Active at high.
- $\overline{\text{AUX}}$ or AUX(L) : Active at low.

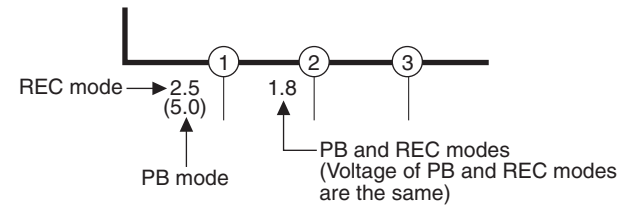
3. Interpreting Connector indications



Note: For the destination of each signal and further line connections that are cut off from the diagram, refer to "BOARD INTERCONNECTIONS"

4. Voltage measurement

- 1) Regulator (DC/DC CONV) circuits
REC : Colour bar signal.
PB : Alignment tape (Colour bar).
— : Unmeasurable or unnecessary to measure.
- 2) Indication on schematic diagram
Voltage indications for REC and PB mode on the schematic diagram are as shown below.

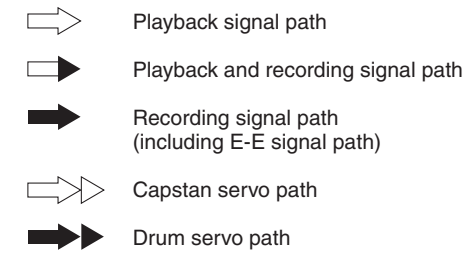


Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

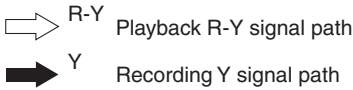
5. Signal path Symbols

The arrows indicate the signal path as follows.

NOTE : The arrow is DVC unique object.

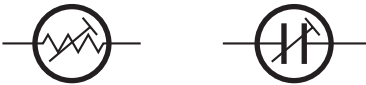


(Example)



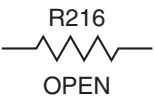
6. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.



7. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.



CIRCUIT BOARD NOTES

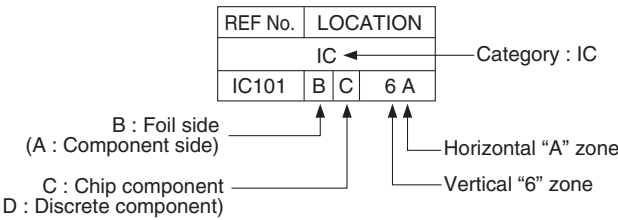
1. Foil and Component sides

- 1) Foil side (B side) :
Parts on the foil side seen from foil face (pattern face) are indicated.
- 2) Component side (A side) :
Parts on the component side seen from component face (parts face) indicated.

Parts location are indicated by guide scale on the circuit board.

2. Parts location guides

Parts location are indicated by guide scale on the circuit board.



Note: For general information in service manual, please refer to the Service Manual of GENERAL INFORMATION Edition 4 No. 82054D (January 1994).

BOARD INTERCONNECTIONS

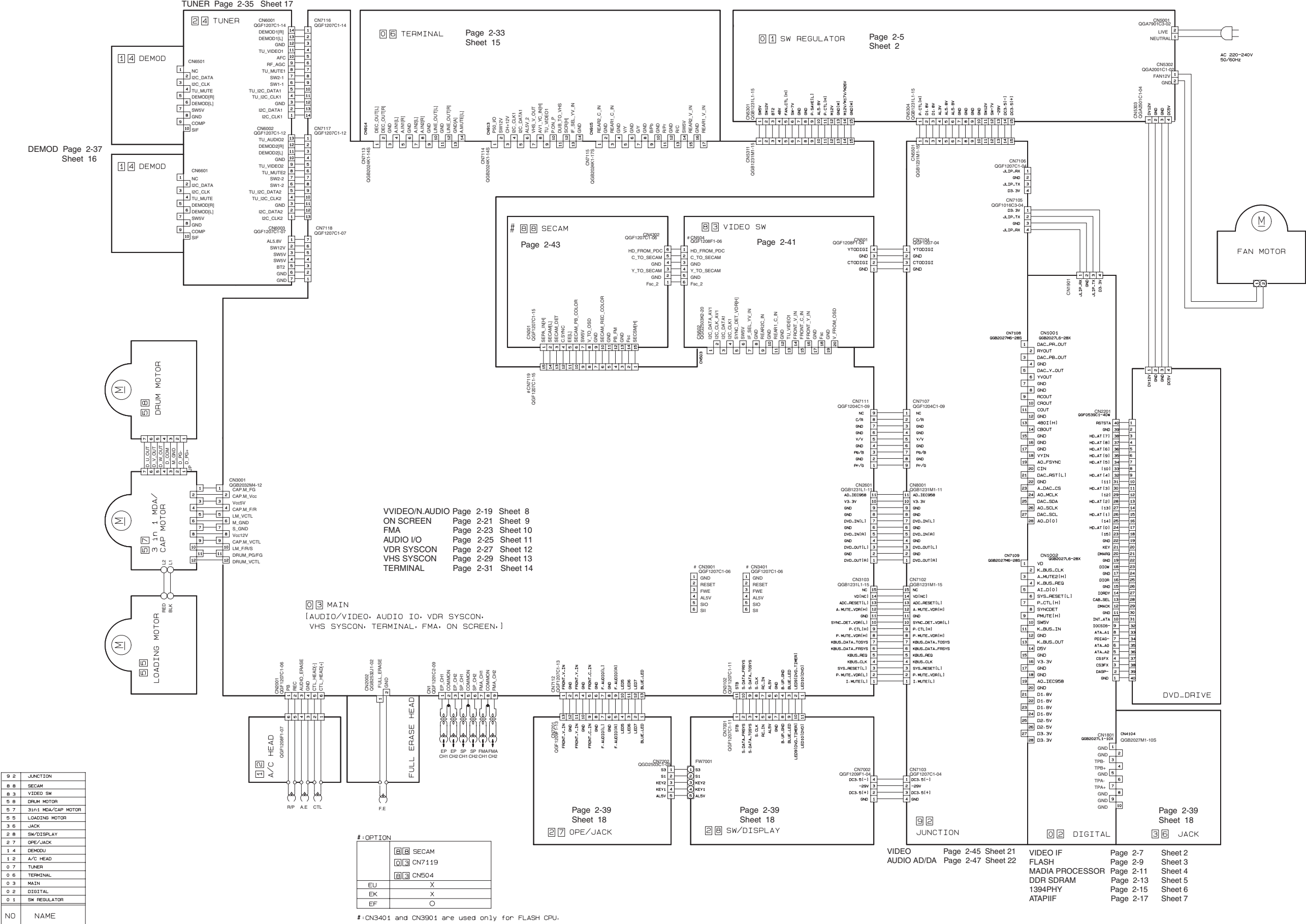
5

4

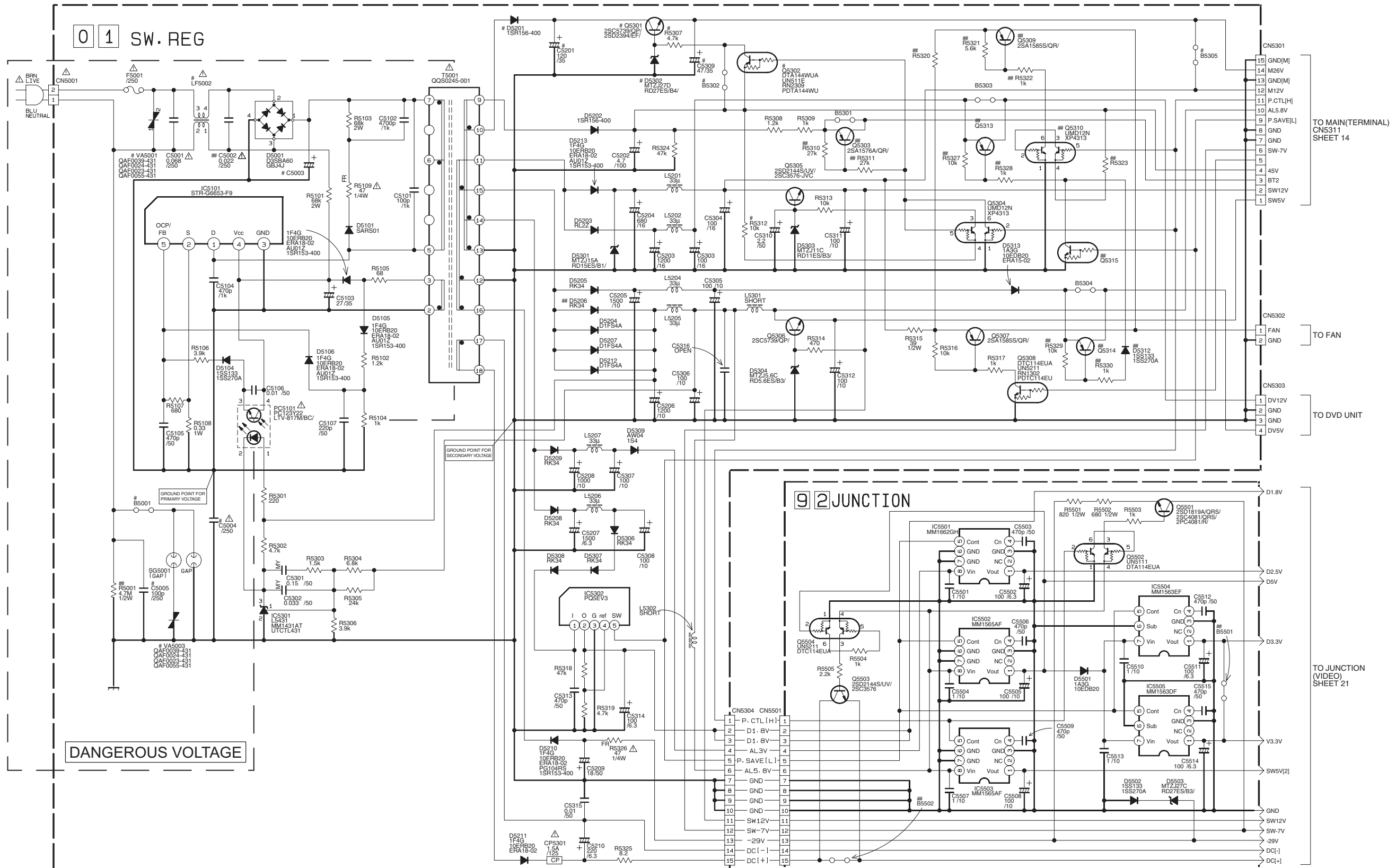
3

2

1



SW.REG AND JUNCTION SCHEMATIC DIAGRAMS



##MARK ELEMENTS ARE NOT MOUNTED.

#DIFFERENCE TABLE 1

JPN	(W/O BS)	B5001	B5302	B5305	C5003	C5004	C5005	F5001	Q5302	VA5001 VA5003	HIGH SPEED FF/REW				LF5002
		YES	NO	NO	330 /250	4700p	YES	2A	YES	YES					QGR0908-001 QGR0984-001 QGR1215-001
EURO	(WITH BS)	NO	YES	YES	82 /400	2200p	NO	T2AL	NO	NO					QGR1031-001

NOTES:UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.

⎓ ELECTROLYTIC
⎓ CERAMIC
⎓ MYLER
⎓ NON POLAR

DIGITAL(VIDEO IF) SCHEMATIC DIAGRAM

5

4

3

2

1

TO MEDIA PROCESSOR
SHEET 4

TO JUNCTION(VIDEO)
CN7108
SHEET 21

TO MEDIA PROCESSOR
SHEET 4

TO JUNCTION(VIDEO)
CN7108
SHEET 21

TO MEDIA PROCESSOR
SHEET 4

## MARK	G1001- R1034	R1047	R1048- R1049- R1051- R1052- R1053- R1055- C1062- Q1006- G1007
UB	O	20040, 5%	X
UPN	O	20040, 5%	X
PAL	X	20040, 5%	O

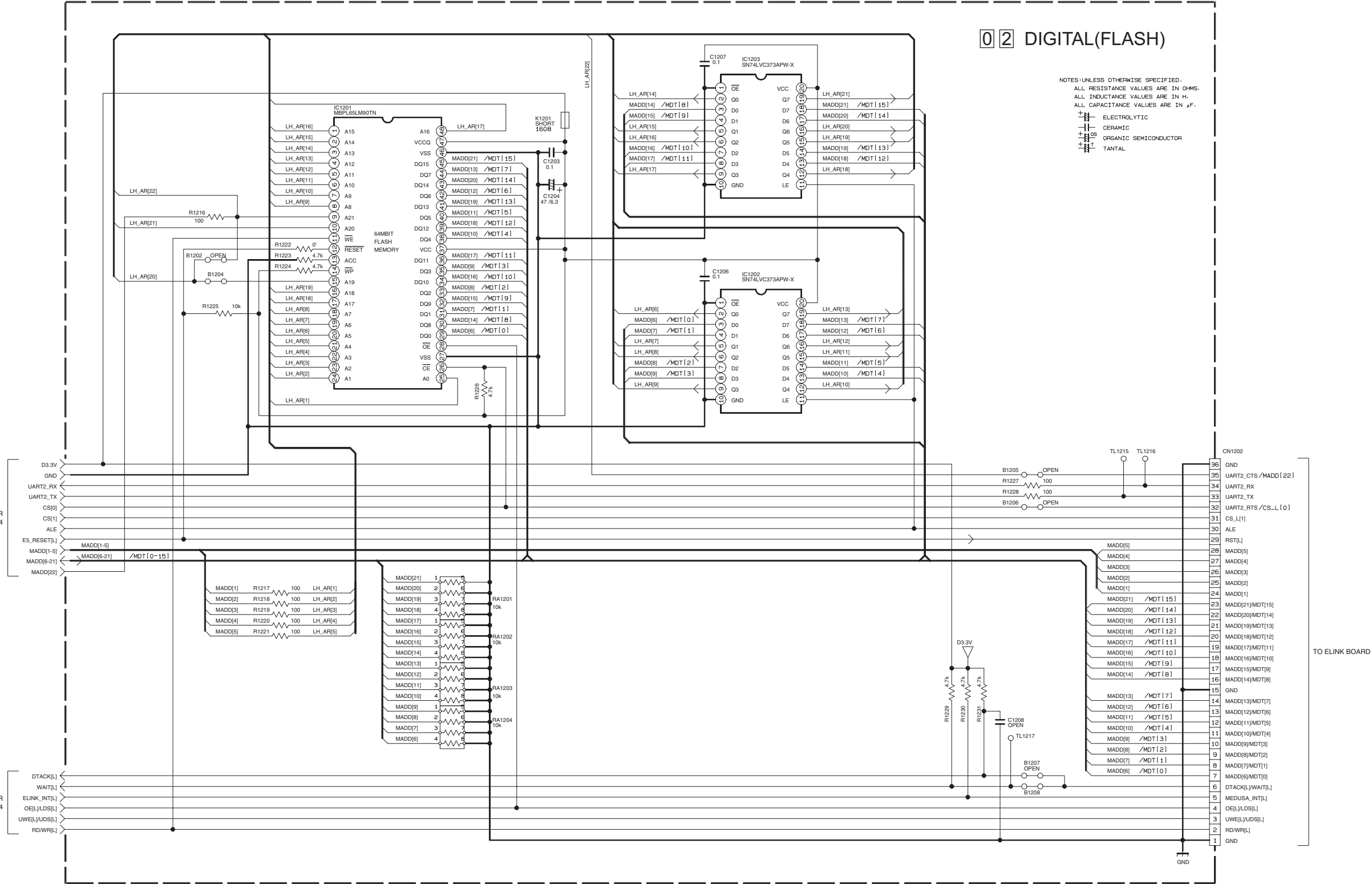
02 DIGITAL(VIDEO IF)

NOTES: UNLESS OTHERWISE SPECIFIED,
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN P.F.
ELECTROLYTIC
CERAMIC
ORGANIC SEMICONDUCTOR
TANTAL

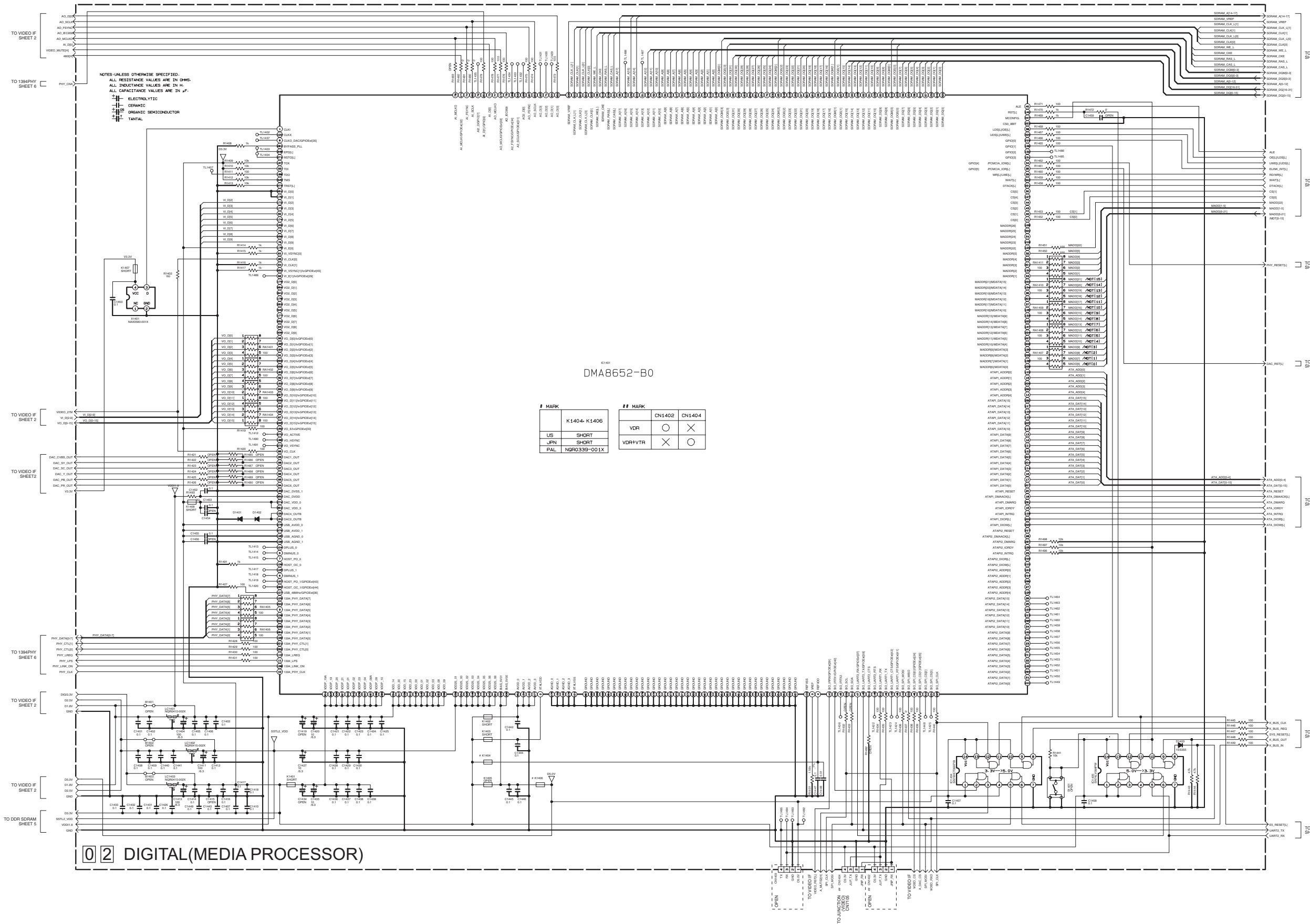
ALL NPN TYPE TRANSISTORS ARE 2SD2419K/95B/-X
OR 2SD2628K/95B/-X
OR 2SD601A/95B/-X
ALL PNP TYPE TRANSISTORS ARE 2SA1037AK/95A/-X
OR 2SA1038A/95A/-X
OR 2SB1024K/95A/-X

TO MEDIA PROCESSOR
SHEET 4

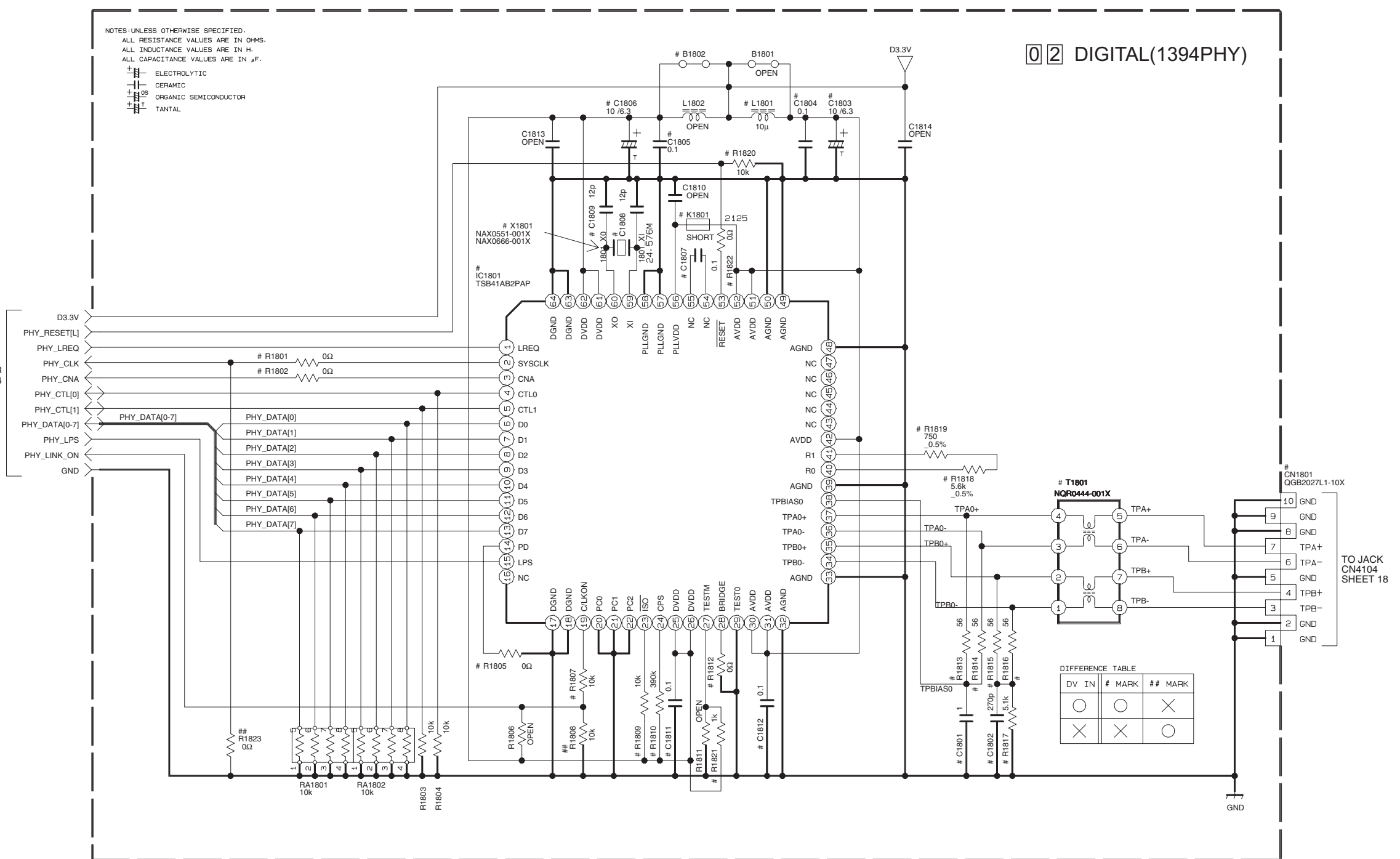
DIGITAL(FLASH) SCHEMATIC DIAGRAM



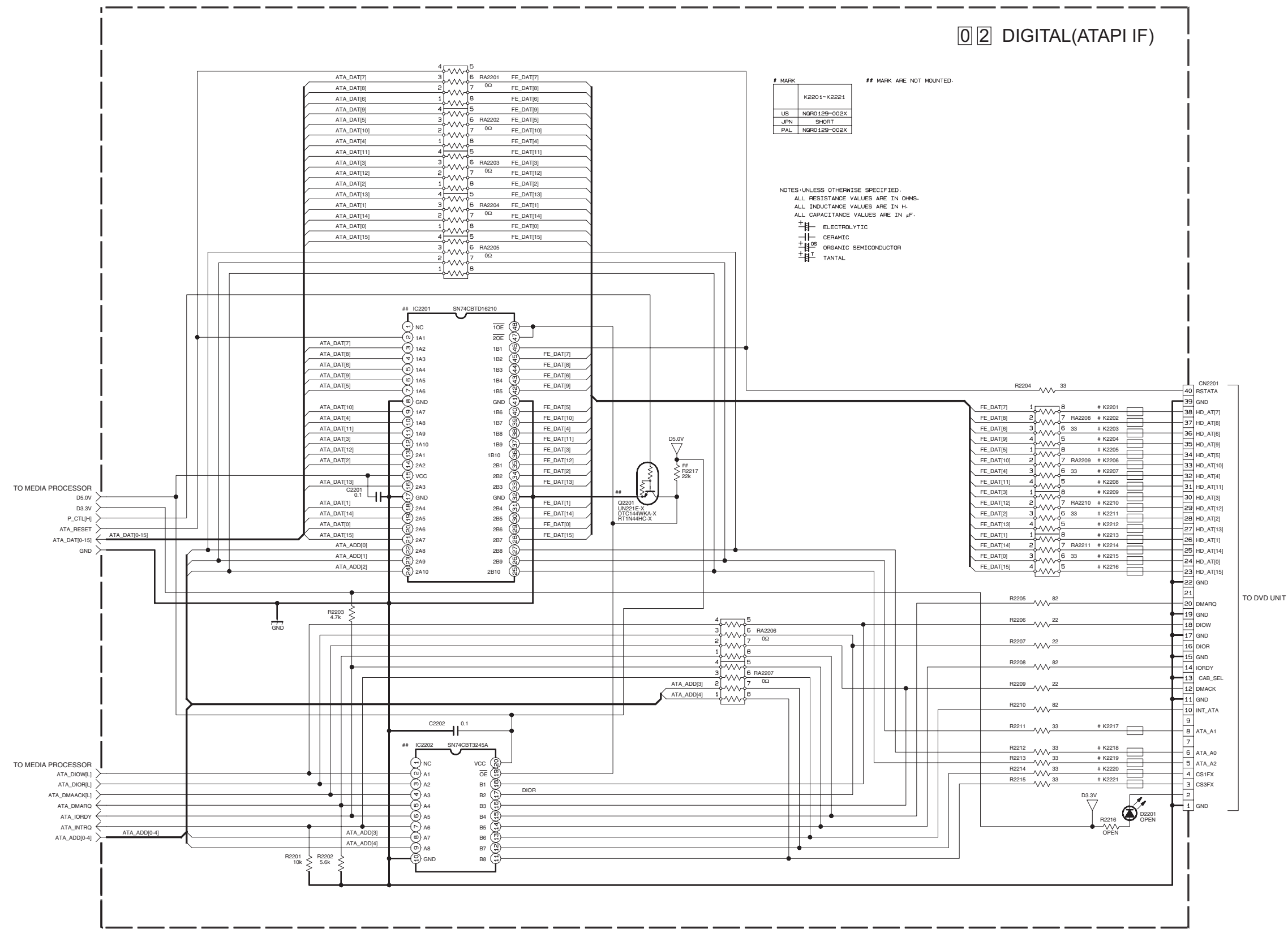
■ DIGITAL(MEDIA PROCESSOR) SCHEMATIC DIAGRAM



DIGITAL(1394PHY) SCHEMATIC DIAGRAM

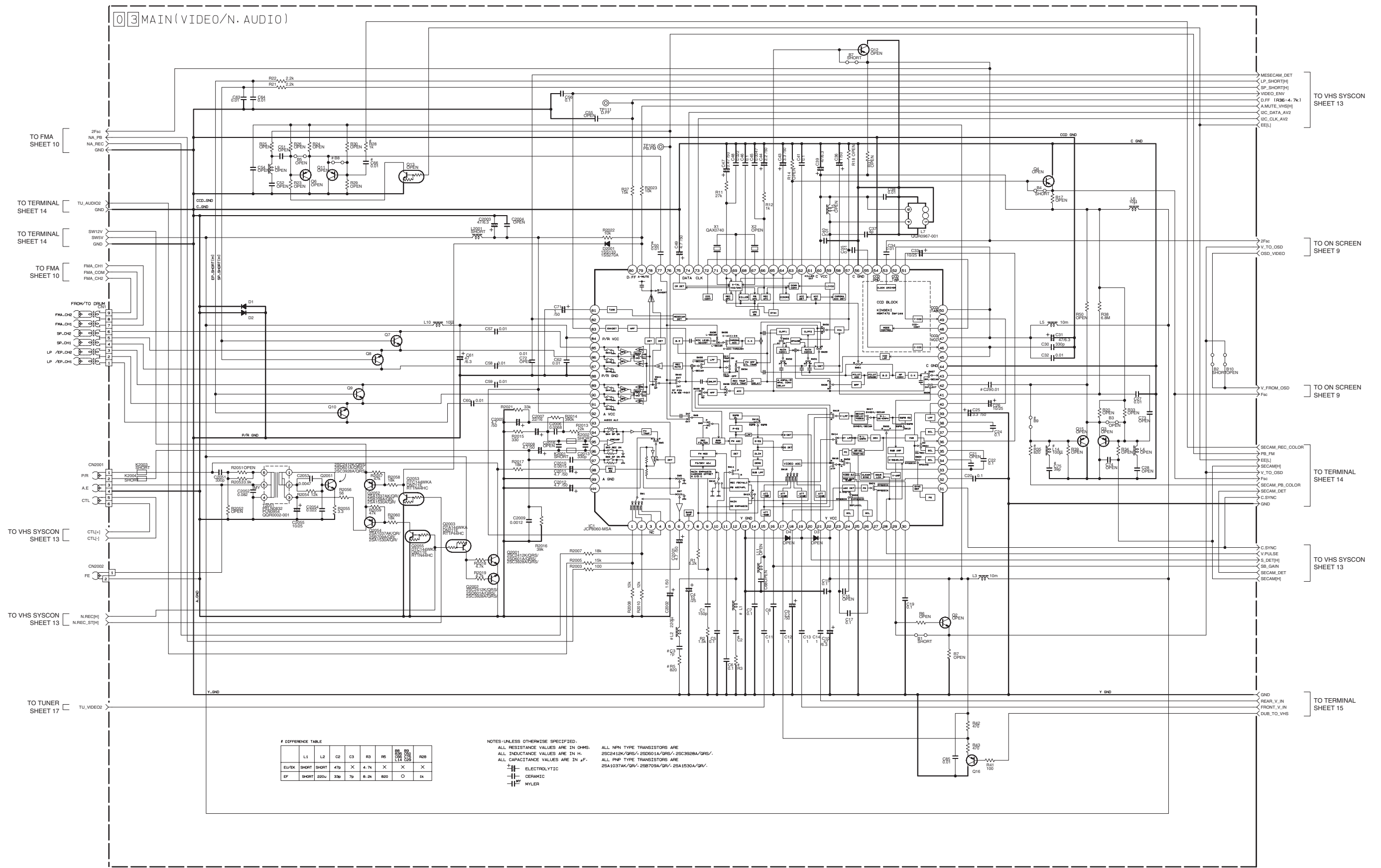


DIGITAL(ATAPI IF) SCHEMATIC DIAGRAM

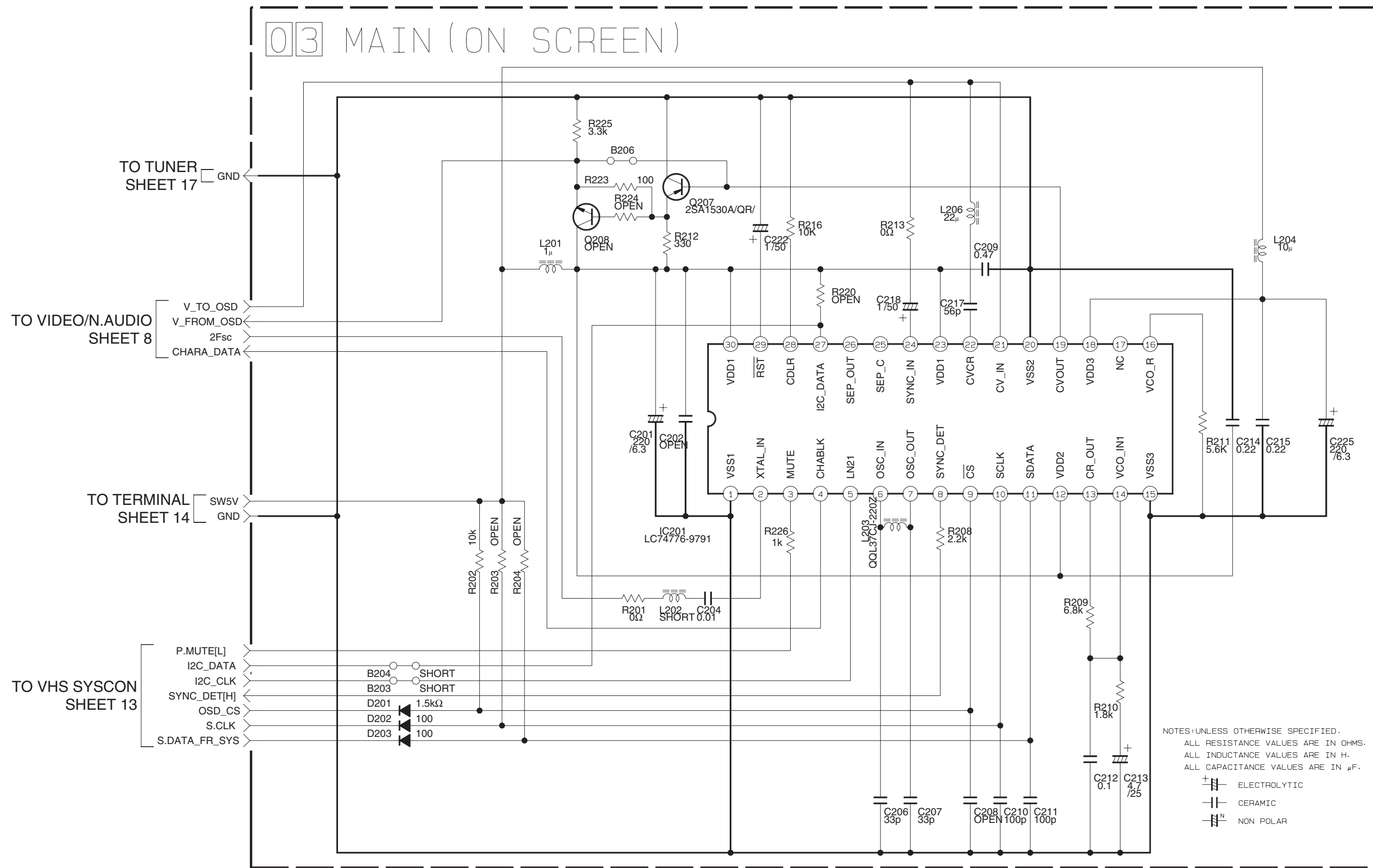


■ MAIN(VIDEO/N.AUDIO) SCHEMATIC DIAGRAM

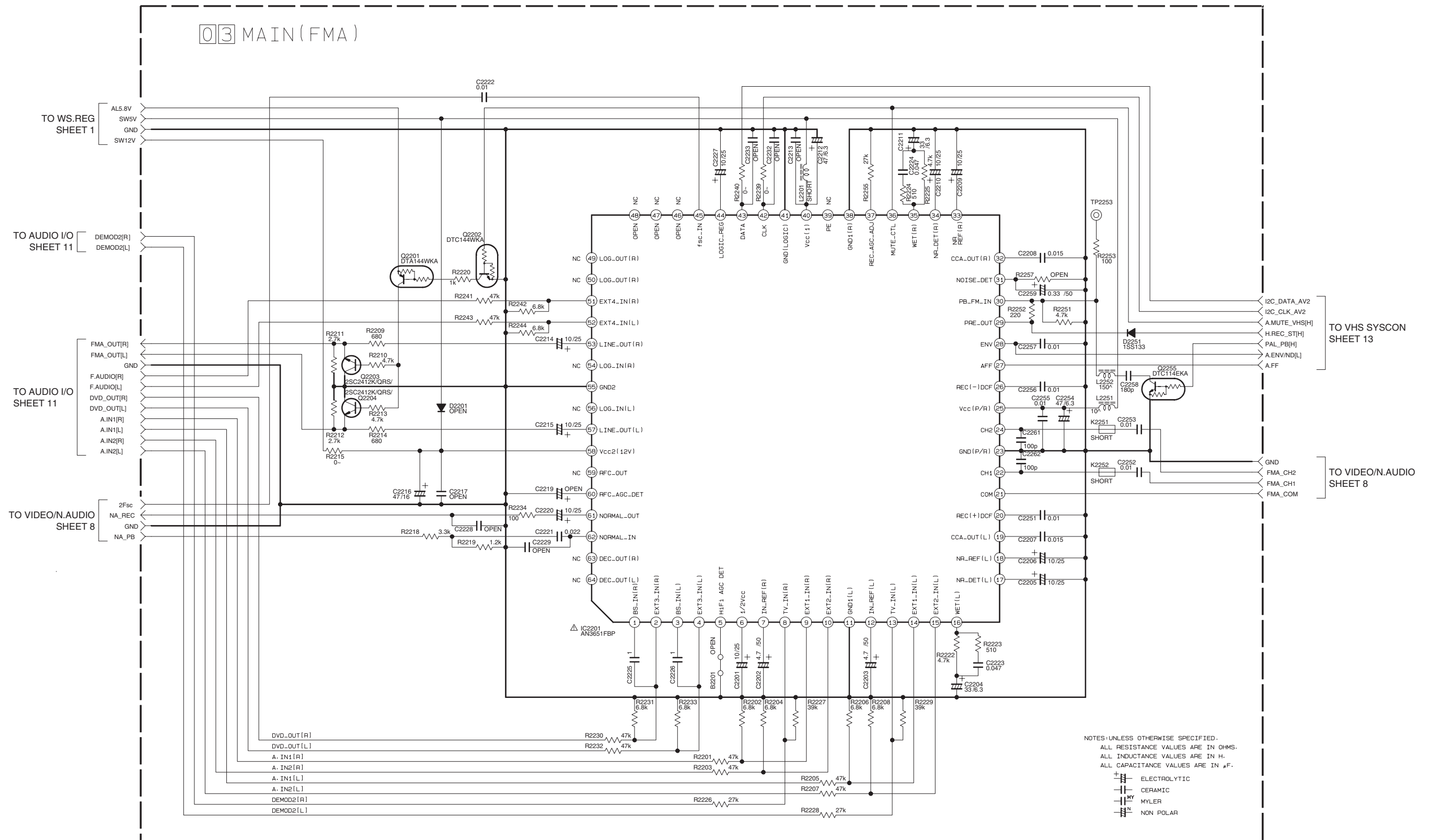
03 MAIN(VIDEO/N. AUDIO)



■ MAIN(ON SCREEN) SCHEMATIC DIAGRAM



■ MAIN(FMA) SCHEMATIC DIAGRAM



MAIN(AUDIO I/O) SCHEMATIC DIAGRAM

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03 MAIN(AUDIO I/O)

TO TERMINAL
SHEET 14

DEM0D1[R]
DEM0D1[L]
A.MUTE[L]
DEM0D2[R]
DEM0D2[L]

TO FMA
SHEET 10

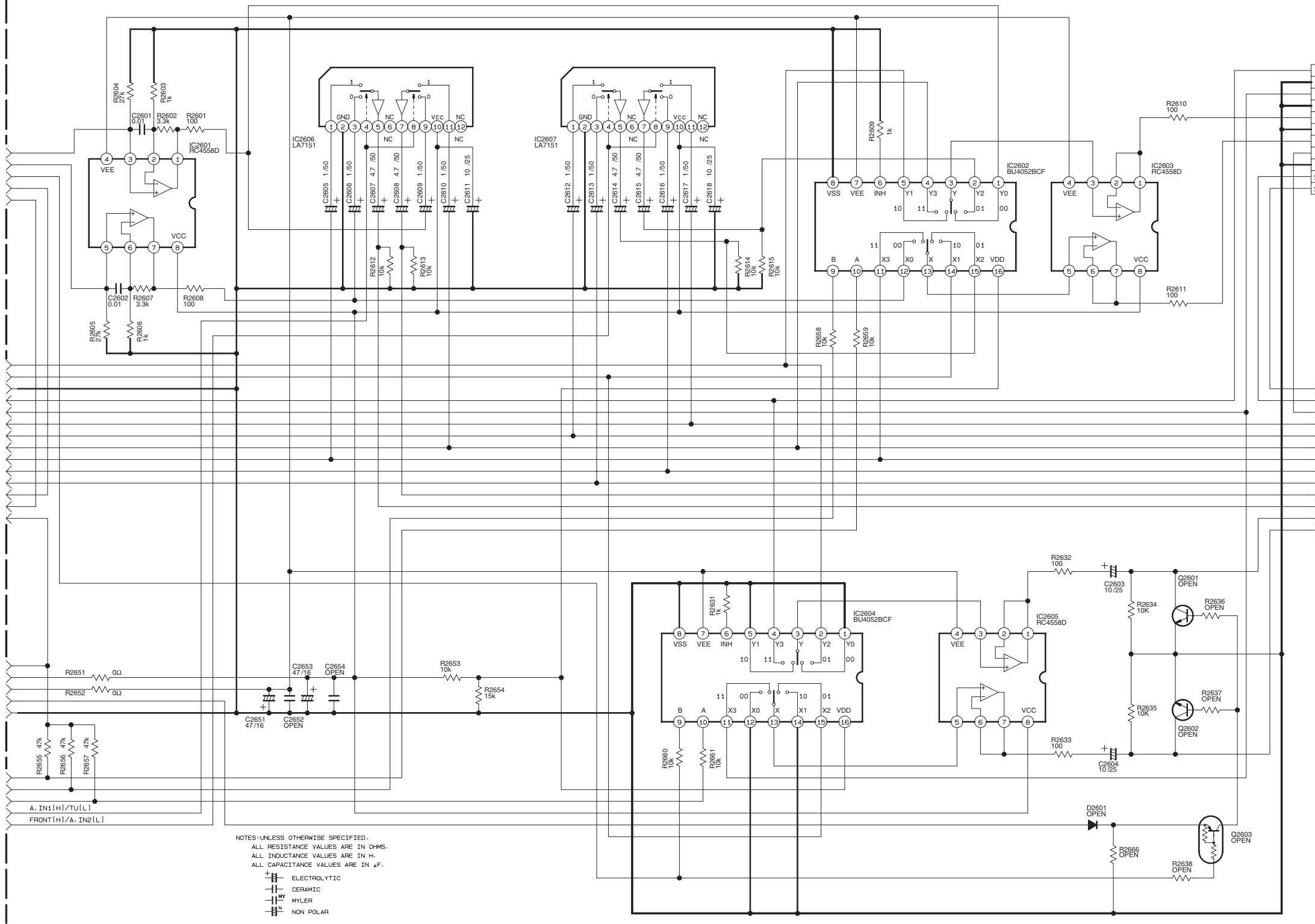
FMA_OUT[R]
FMA_OUT[L]
GND
DVD_OUT[R]
DVD_OUT[L]
F.AUDIO[R]
F.AUDIO[L]
A.IN1[R]
A.IN1[L]
A.IN2[R]
A.IN2[L]
DEM0D2[R]
DEM0D2[L]
SW5V

TO TERMINAL
SHEET 14

SW5V
SW12V
SW-7V
ALS.6V
GND

TO VDR SYSCON
SHEET 12

A_INPUT_SEL1
A_INPUT_SEL2
VDR[H]
DEC_SEL
FRONT[H]



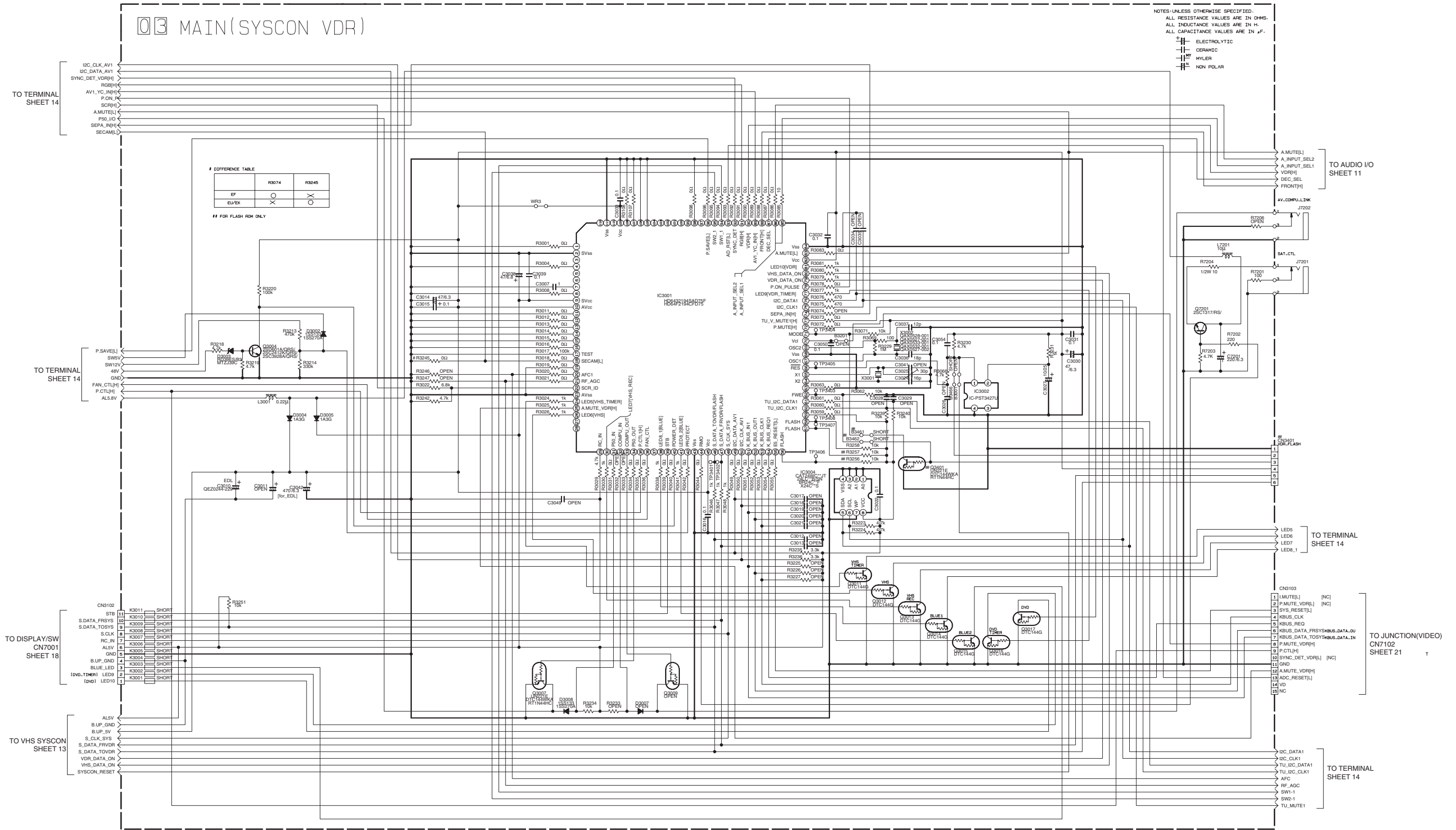
CN2601
1 DVD_OUT[R]
2 GND
3 DVD_OUT[L]
4 GND
5 DVD_IN[R]
6 GND
7 DVD_IN[L]
8 GND(A)
9 GND
10 V3.3V
11 AD_I.C958

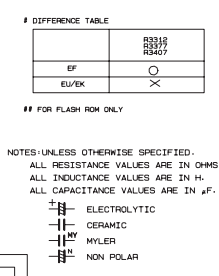
TO JUNCTION
(AUDIO AD/DA)
CN8001
SHEET 22

AD_I.C958
V3.3V
GND[A]
F.AUDIO[R]
F.AUDIO[L]
A.IN1[R]
A.IN1[L]
A.IN2[R]
A.IN2[L]
DEC_OUT[R]
DEC_OUT[L]
LINE_OUT[R]
LINE_OUT[L]

TO TERMINAL
SHEET 14

■ MAIN(VDR SYSCON) SCHEMATIC DIAGRAM

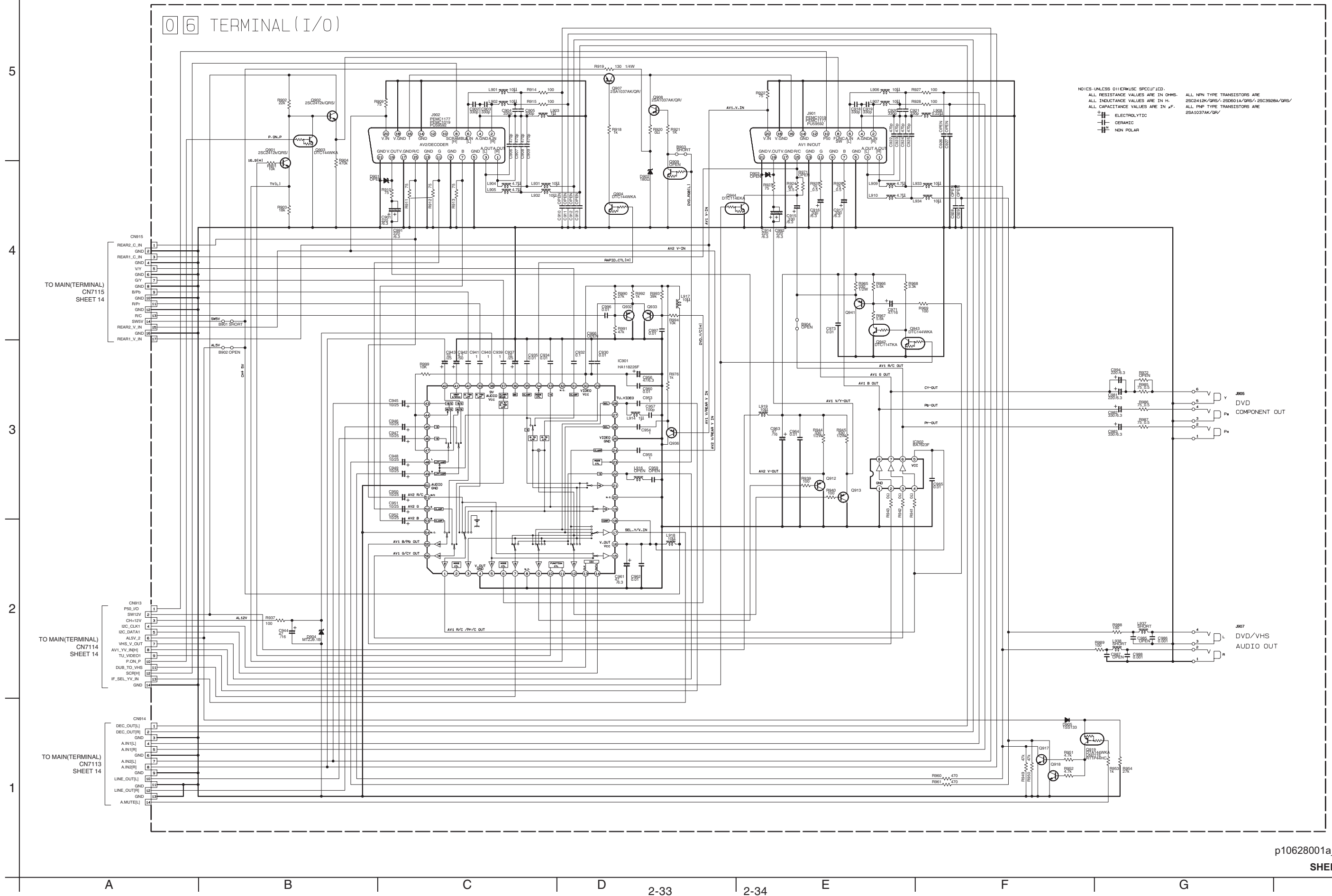




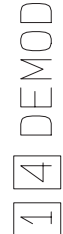
1



■ TERMINAL(I/O) SCHEMATIC DIAGRAM



1



		V13			V14				V15- V16		V14DV53		D2		
		FRANCE MS	EU/EK	ARC	EU/EK	FRANCE MS	KOREA	ARC 4SYSTEM	ARC 3SYSTEM	EU/EX/EK	MS/EF	KR	MS	EX/EK	AA/AG
DEMOM PWB ASSY		LPA10094 -01*	LPA10094 -02*	LPA10094 -03*	LPA10094 -04*	LPA10094 -05*	LPA10094 -06*	LPA10094 -07*	LPA10094 -08*	LPA10094 -09*	LPA10094 -10*	LPA10094 -11*	LPA10094 -12*	LPA10094 -13*	LPA10094 -14*
PRE AMP	R6703	47	47	47	0	0	47	0	0	0	0	47	0	0	0
	R6705	270	270	100	270	270	270	270	270	270	270	270	270	270	270
	R6706	150	150	X	X	X	100	X	X	X	X	100	X	X	X
	C6702	0.0022	0.0022	0.0022	X	X	X	X	X	X	X	X	X	X	X
	C6703	X	X	220p	X	X	X	220p	180p	X	X	X	X	X	180p
	C6705	0.001	0.001	X	X	X	0.001	X	X	X	X	0.001	X	X	X
	L6701	1 μ	1 μ	1 μ	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT	SHORT
MONO IN	R6702	3.3 μ	3.3 μ	3.3 μ	X	X	3.3 μ	3.3 μ	3.3 μ	X	X	3.3 μ	X	X	3.3 μ
	C6724	0.22/50	X	X	X	0.22/50	X	X	X	X	0.22/50	X	0.22/50	X	X
	R6718	X	X	X	X	X	X	X	X	X	X	X	X	X	X
I2C-BUS	R6708	100	100	100	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	10K	10K
	R6709	100	100	100	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	1K	1K
	K6703	FE 600	FE 600	FE 600	1K	1K	1K	1K	1K	10K	0	1K	1K	FE 600	FE 600
	K6704	FE 600	FE 600	FE 600	1K	1K	1K	1K	1K	0	0	1K	1K	FE 600	FE 600
	C6710- C6711	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ANALOG Vcc	R6707	22	47	47	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	39	0	0
	K6701	FE 600	FE 600	FE 600	33	33	33	33	33	33	33	39	FE 600	FE 600	FE 600
	C6706	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DIGITAL Vcc	R6710	10	12	12	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	12	0	0
	K6705	FE 600	FE 600	FE 600	10	10	10	10	10	0	10	12	FE 600	FE 600	FE 600
	C6712	X	X	X	X	X	X	X	X	X	X	X	X	X	X
DAC Vcc	R6715	47	47	47	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	FE 600	47	47	47
	K6706	FE 600	FE 600	FE 600	47	47	47	47	47	47	47	FE 600	FE 600	FE 600	
	C6718	X	X	X	X	X	X	X	X	X	X	X	X	X	X
X' TAL	C6708	8p	8p	8p	7p	7p	7p	7p	7p	7p	7p	7p	8p	7p	7p
	R6709	1p	1p	1p	3p	3p	3p	3p	3p	3p	3p	3p	2p	3p	3p
DAC OUT	R6713- R6715	X	X	X	X	X	X	X	X	12K	12K	X	X	O	O
	C6714- C6716	0.0068	0.0068	0.0068	0.0022	0.0068	0.0022	0.0022	0.0022	0.0022	0.0068	0.0022	0.0068	0.0022	0.0022
VREF	C6722	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	C6723	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01

FUNCTION	SYMBOL	EU/EK	EF
TUNER	TUE001: TUE002	ALPS GAU0261	L8 GAU0299
MONO IN	AE032, AE033, CE037	×	○
	AE132, AE133, CE137	×	○

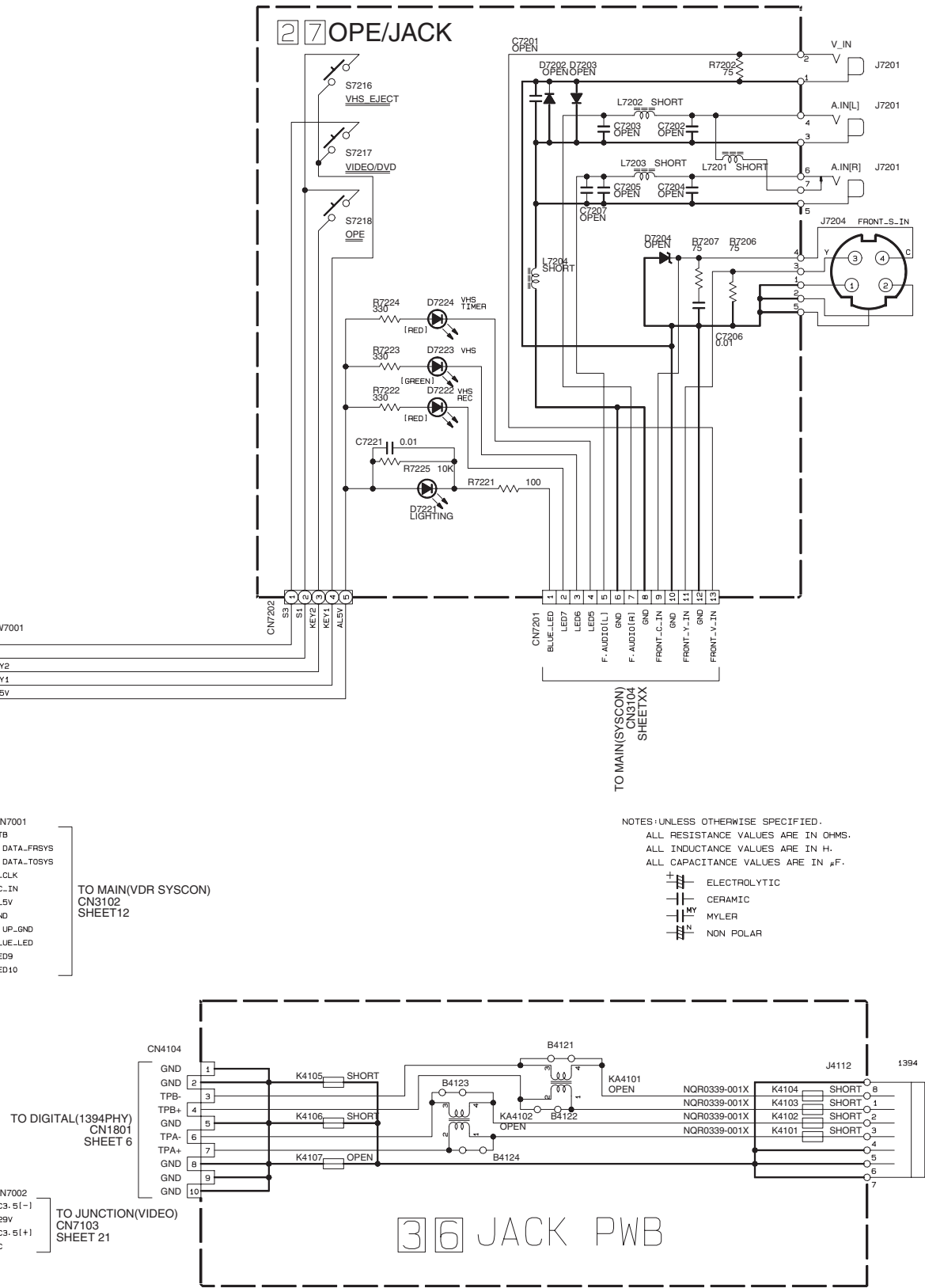
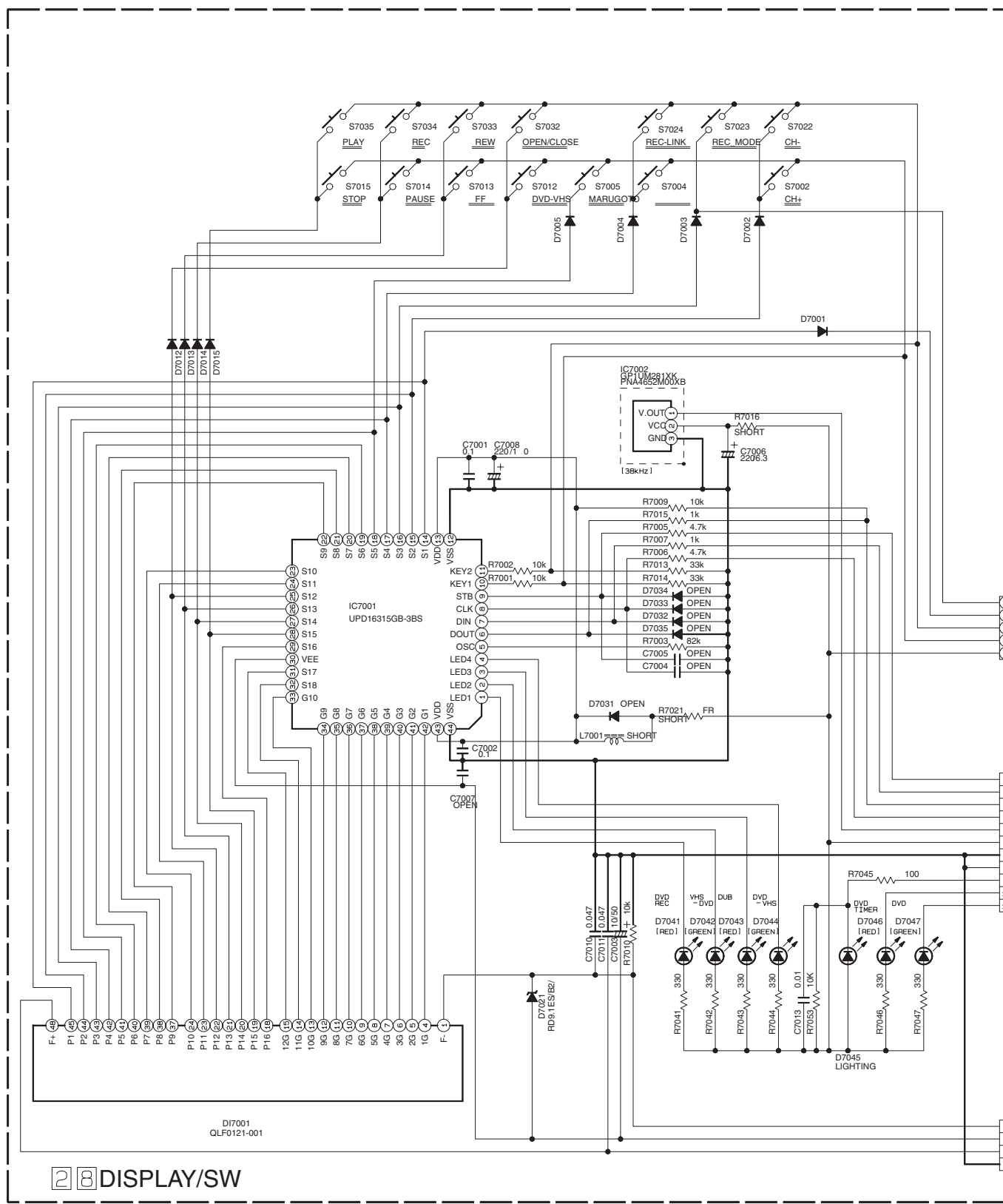
2

1

SHEET 17

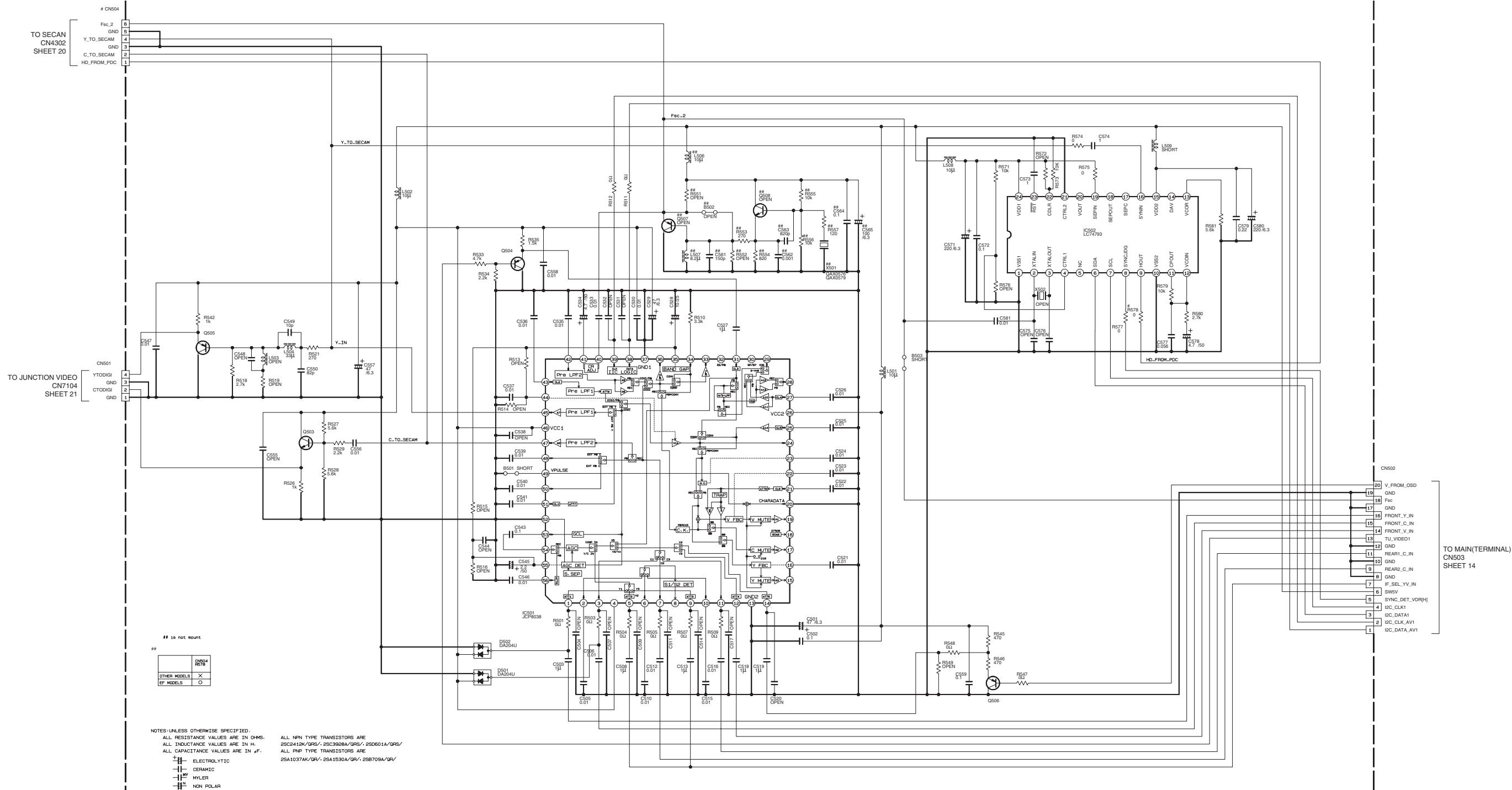
■ OPERATION JACK, SWITCH DISPLAY AND JACK SCHEMATIC DIAGRAM

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VIDEO SW SCHEMATIC DIAGRAM

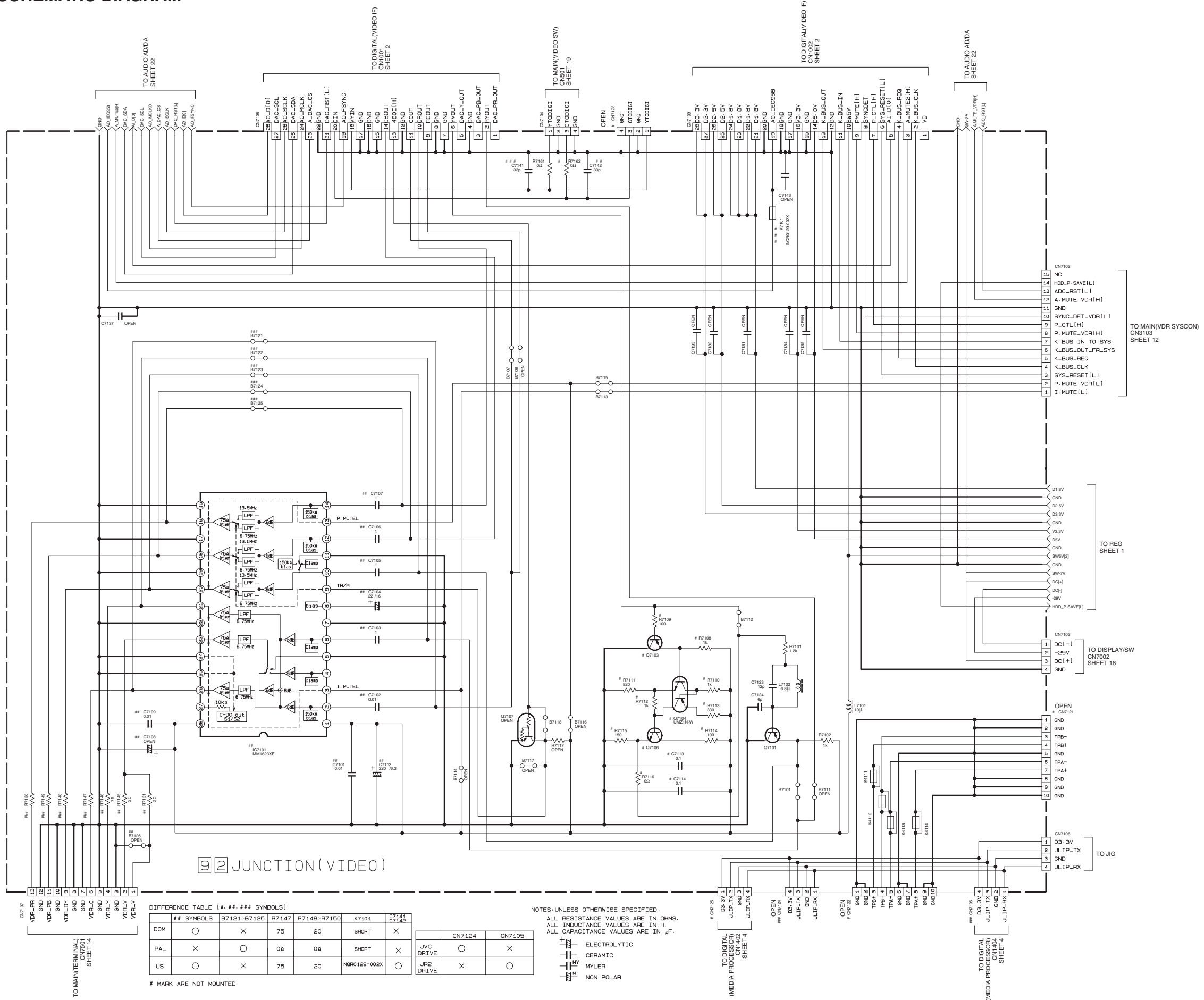
8 3 VIDEO SW



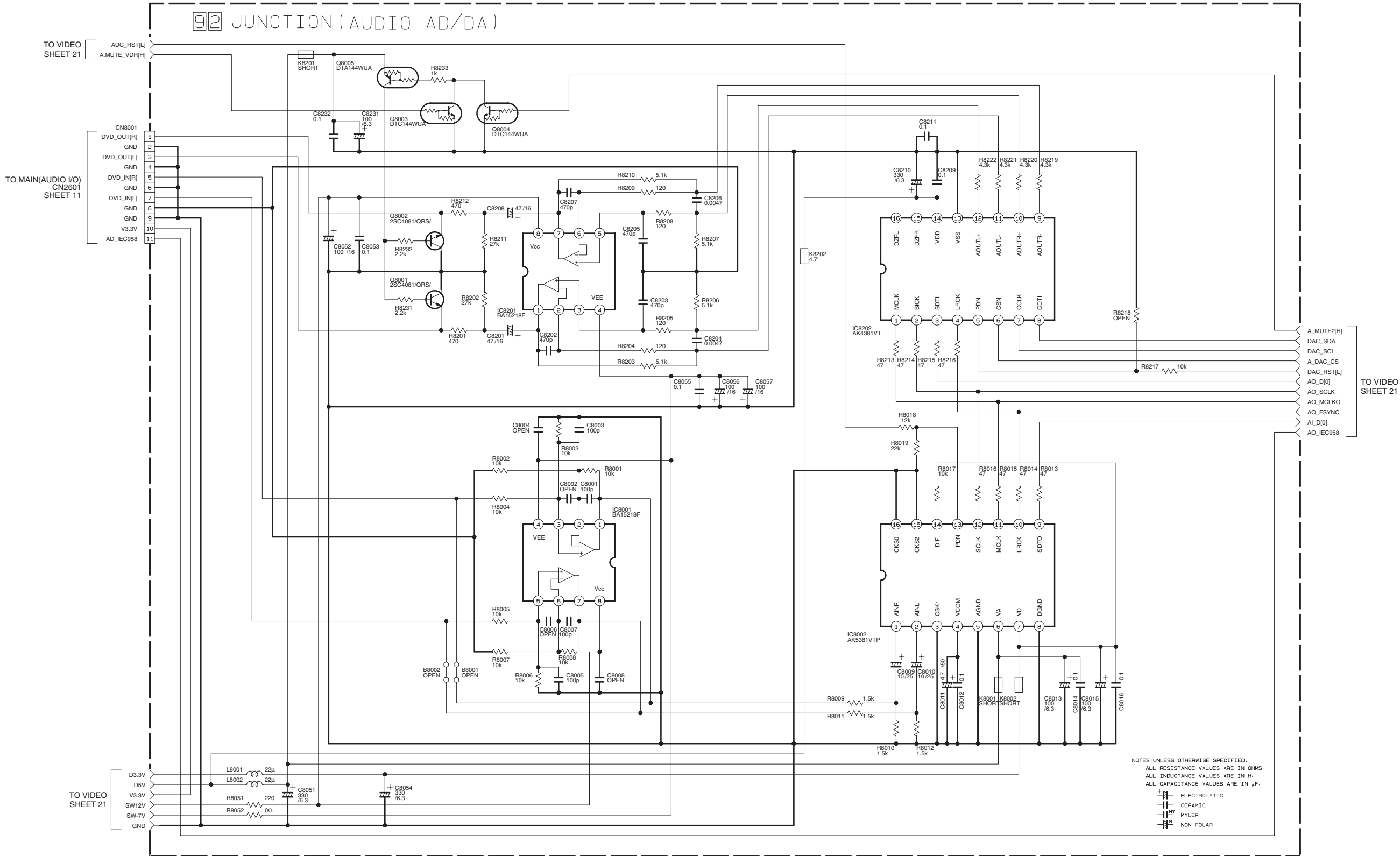
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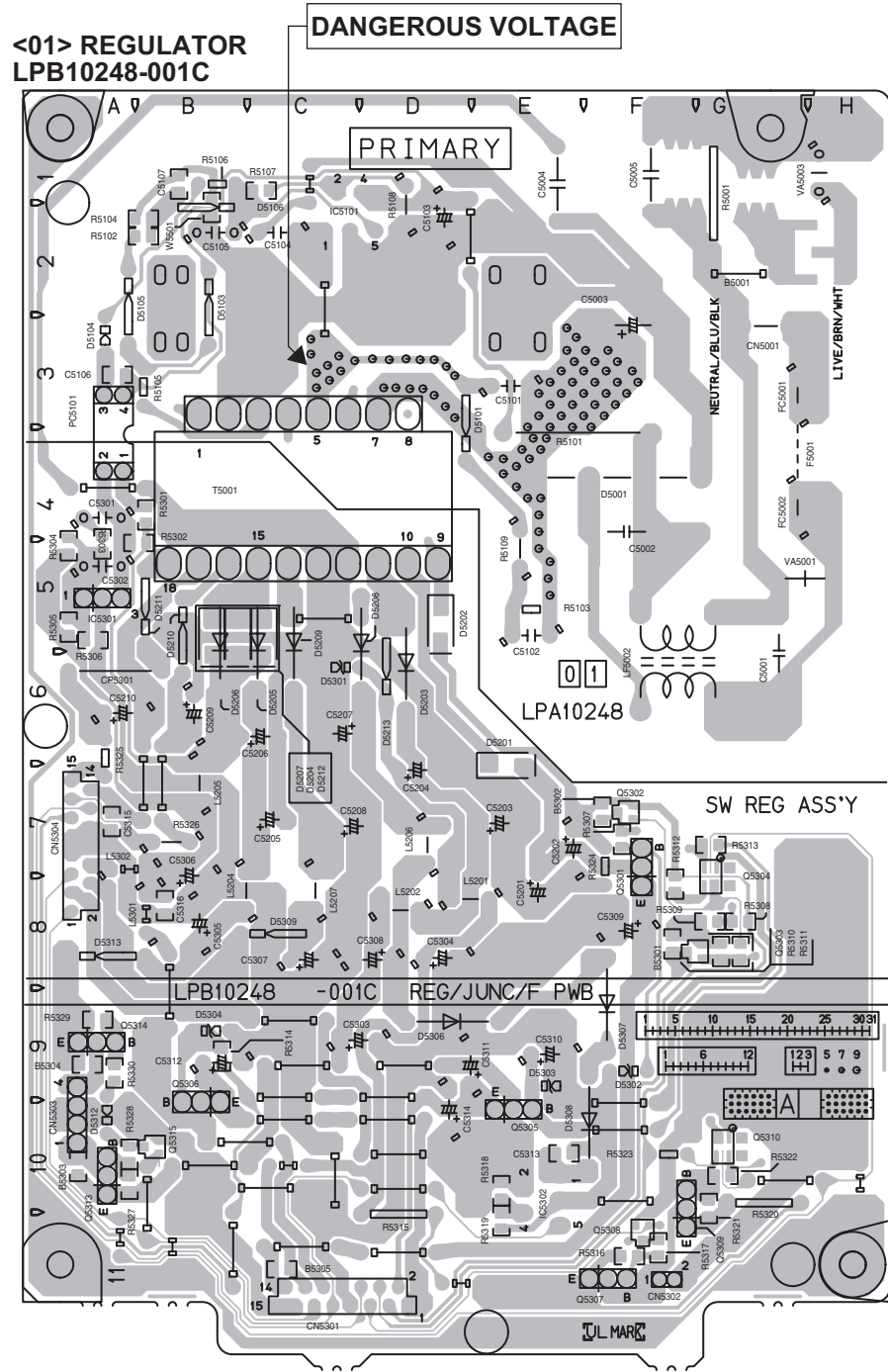
VIDEO(JUNCTION) SCHEMATIC DIAGRAM



■ JUNCTION(AUDIO AD/DA) SCHEMATIC DIAGRAM



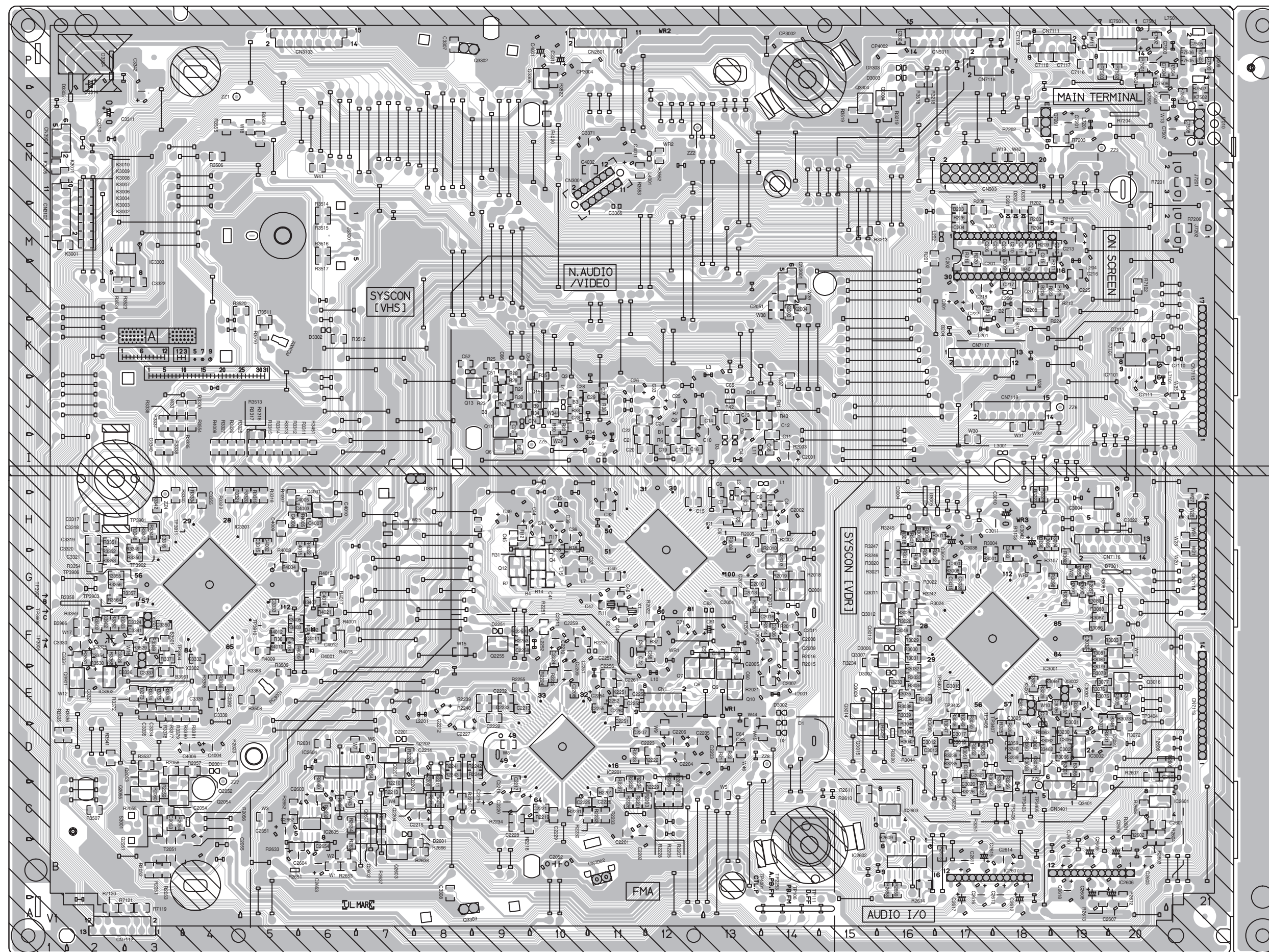
■ REGULATOR CIRCUIT BOARD



COMPONENT PARTS LOCATION GUIDE <REGULATOR> LPB10248-001C

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	
CAPACITOR																				
C5001	A D 5G	C5301	A D 4A	C5508	A D 5J	CN5502	A D 5L	D5212	B C 5C	COIL		L5201	A D 8D	Q5315		B C 10B	R5311	B C 8G	FC5001	A D 4G
C5002	A D 4F	C5302	A D 5A	C5509	B C 5J	CN5503	A D 5L	D5213	A D 5D	L5202	A D 8C	R5312	B C 8F	FC5002	A D 3G	L5203	A D 8C	R5313	B C 7D	
C5003	A D 3F	C5303	A D 9C	C5510	B C 7J	CN5504	A D 6B	D5301	A D 6C	L5204	A D 8C	R5314	B C 7C	LF5002	A D 5D	L5205	A D 8C	R5315	A D 5D	
C5004	A D 1E	C5304	A D 8B	C5511	A D 7J	CP5301	A D 6B	D5302	A D 6B	L5206	A D 7B	R5316	A D 4E	PC5101	A D 4A	L5207	A D 7D	R5317	A D 4A	
C5005	A D 1F	C5305	A D 8B	C5512	B C 7J			D5303	A D 9E	L5208	A D 7D	R5101	A D 4E	R5315	A D 11F	TS5001	B C 2B	R5318	B C 8H	
C5101	A D 3E	C5306	A D 8B	C5513	B C 8J	DIODE		D5304	A D 9B	L5206	A D 7D	R5102	B C 2B	R5316	B C 11F	TS5001	B C 2B	R5319	B C 11F	
C5102	A D 5E	C5307	A D 8C	C5514	A D 8J	D5001	A D 4E	D5306	A D 9D	L5207	A D 8C	R5103	A D 5E	R5317	B C 11F	TS5001	B C 2H	R5320	B C 11F	
C5103	A D 5E	C5308	A D 8D	C5515	B C 8J	D5101	A D 3D	D5307	A D 8F	L5301	A D 8B	R5104	B C 2B	R5318	B C 10E	VA5001	A D 1H	R5321	B C 10E	
C5104	A D 1D	C5309	A D 8F	C5516	A D 8K	D5103	A D 3B	D5308	A D 9F	L5302	A D 7A	R5105	A D 3B	R5319	B C 11E	VA5003	A D 5H	R5322	B C 11E	
C5105	A D 2C	C5310	A D 9E	C5517	B C 5K	D5104	A D 3A	D5309	A D 8C			R5106	A D 1B	R5320	A D 10G			R5323	B C 10G	
C5105	A D 2B	C5311	A D 9E	C5518	A D 5K	D5105	A D 3A	D5312	A D 9A	TRANSISTOR		R5107	B C 1C	R5321	B C 10G			R5324	B C 10G	
C5106	B C 3A	C5312	A D 9B	C5519	A D 5K	D5106	A D 3A	D5313	A D 8B	Q5301	A D 8F	R5108	A D 1D	R5322	B C 10G			R5325	B C 10F	
C5107	B C 1B	C5313	B C 10E	C5520	B C 5K	D5201	B C 7E			Q5302	B C 7F	R5109	A D 5E	R5323	A D 10F			R5326	A D 8F	
C5201	A D 7E	C5314	A D 10D	C5521	A D 5J	D5202	B C 5D	IC		Q5303	B C 8G	R5109	B C 4B	R5324	A D 6A			R5327	A D 7B	
C5202	A D 7E	C5315	B C 7A	C5522	B C 4J	D5203	A D 5D	IC5101	A D 2C	Q5304	B C 8G	R5201	B C 5B	R5325	A D 8F			R5328	A D 10A	
C5203	A D 7E	C5316	B C 8B			D5204	B C 5B	IC5301	A D 5A	Q5305	A D 10E	R5202	B C 5A	R5326	A D 8A			R5329	B C 9A	
C5204	A D 7D	C5501	B C 6J	CONNECTOR		D5205	A D 5C	IC5302	A D 10E	Q5306	A D 10B	R5203	B C 5A	R5327	B C 10A			R5330	B C 9A	
C5205	A D 7C	C5502	A D 6J	CN5001	A D 3G	D5206	A D 5B	IC5501	B C 6J	Q5307	A D 11F	R5204	B C 5A	R5328	B C 10A					
C5206	A D 6B	C5503	B C 6J	CN5001	A D 11D	D5207	B C 5B	IC5502	B C 7J	Q5308	B C 11F	R5205	B C 5A	R5329	B C 9A					
C5207	A D 6D	C5504	B C 7J	CN5002	A D 11F	D5208	A D 5D	IC5503	B C 5J	Q5309	A D 11F	R5206	B C 7F	R5330	B C 9A					
C5208	A D 7C	C5505	A D 6J	CN5003	A D 6A	D5209	A D 5C	IC5504	B C 7J	Q5310	B C 10C	R5207	B C 8G							
C5209	A D 6B	C5506	B C 7J	CN5003	A D 6A	D5210	A D 5B	IC5505	B C 8J	Q5311	A D 10A	R5208	B C 8G							
C5210	A D 6A	C5507	B C 5J	CN5501	A D 6A	D5211	A D 5B	IC5506	A D 4K	Q5314	A D 9A	R5310	B C 8G	OTHER		F5001	A D 4G			

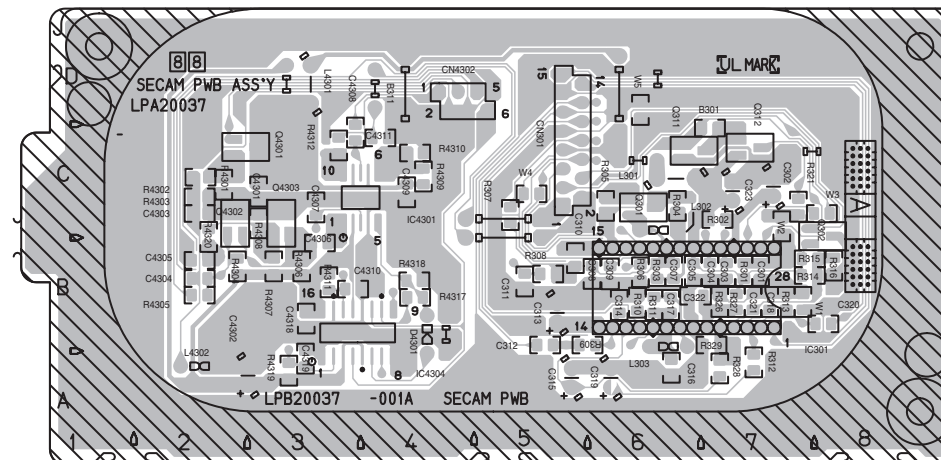
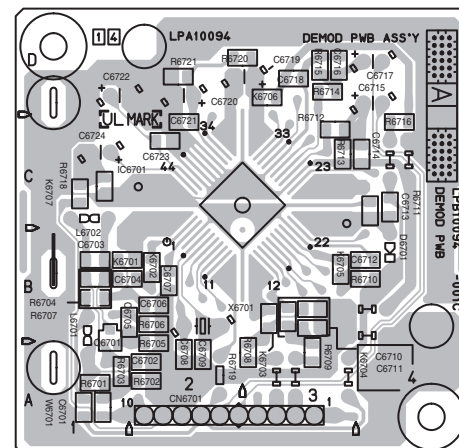
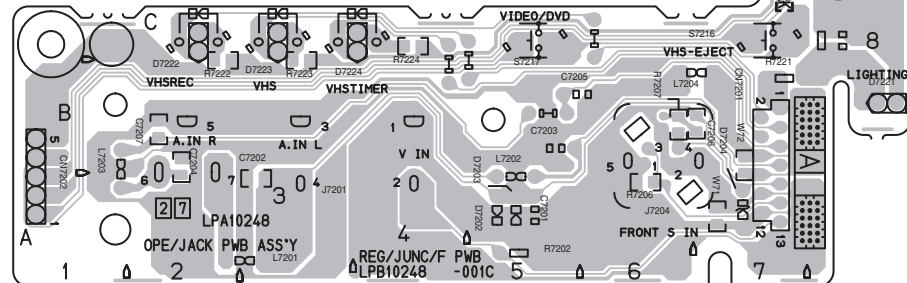
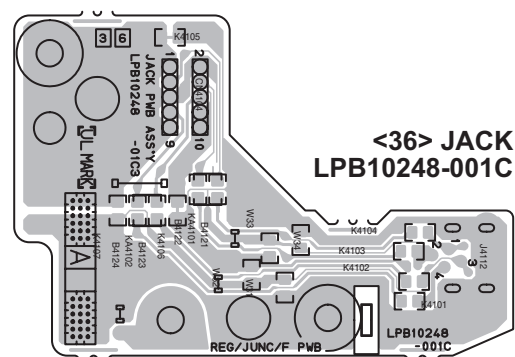
<03> MAIN
LPB10245-001B



COMPONENT PARTS LOCATION GUIDE <MAIN> LPB10245-001B

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR																	
C1	B C 13H	C2211	A D 10F	C3339	B C 4E	L3	A D 12K	R209	B C 18M	R3011	B C 17H	R3334	B C 4H	J7202	A D 21M		
C2	B C 13H	C2212	A D 8E	C3340	B C 3I	L4	A D 10J	R210	B C 19M	R3012	B C 17G	R3335	B C 3J	JS3001	A D 6M		
C3	B C 13H	C2213	B C 9E	C3341	B C 3F	L5	A D 11I	R211	B C 19L	R3013	B C 16H	R3336	B C 3J	K2001	B C 14G		
C4	A D 14H	C2214	A D 8D	C3342	A D 3O	L6	A D 10I	R212	B C 19L	R3014	B C 16G	R3337	B C 3J	K2002	B C 13G		
C5	B C 13H	C2215	A D 8C	C3350	B C 3F	L7	A D 10G	R213	B C 17L	R3015	B C 16H	R3338	B C 3I	K2003	B C 14L		
C6	B C 13H	C2216	A D 9C	C3354	B C 2F	L9	A D 8K	R216	B C 17M	R3016	B C 16G	R3340	B C 3H	K2004	B C 14L		
C7	B C 13H	C2217	B C 9C	C3355	B C 4H	L10	A D 11E	R220	B C 17M	R3017	B C 16H	R3342	B C 3H	K2251	B C 11E		
C8	B C 13H	C2218	A D 9C	C3366	B C 6H	L11	A D 13I	R223	B C 19L	R3018	B C 16H	R3346	B C 3H	K2252	B C 11E		
C9	A D 13J	C2220	A D 9C	C3371	A D 10O	L14	A D 9J	R224	B C 19L	R3019	B C 16G	R3347	B C 3H	K3001	B C 1M		
C10	A D 13J	C2221	B C 10C	C4001	A D 10P	L15	A D 10G	R225	B C 19L	R3020	B C 16G	R3348	B C 3H	K3002	B C 2M		
C11	B C 14J	C2222	B C 9E	C4002	B C 5H	L201	A D 18K	R226	B C 17M	R3021	B C 16G	R3349	B C 3H	K3003	B C 2M		
C12	B C 14J	C2223	B C 10C	C4003	B C 6H	L202	A D 17M	R2003	B C 14I	R3022	B C 16G	R3350	B C 3G	K3004	B C 2M		
C13	B C 13J	C2224	B C 10F	C4004	A D 4D	L203	A D 17M	R2005	B C 13H	R3024	B C 16G	R3351	B C 2H	K3005	B C 1N		
C14	B C 13J	C2225	B C 10C	C4005	B C 6H	L204	A D 19M	R2007	B C 14H	R3025	B C 16F	R3352	B C 2G	K3006	B C 2M		
C15	B C 12H	C2226	B C 11C	C4006	A D 4D	L206	A D 18L	R2008	B C 13H	R3026	B C 16F	R3353	B C 2G	K3007	B C 2M		
C16	B C 12H	C2227	A D 8D	C4007	B C 6H	L2001	A D 14E	R2010	B C 14H	R3029	B C 16F	R3354	B C 2G	K3008	B C 2N		
C17	B C 12I	C2228	B C 9C	C4008	B C 5H	L2201	A D 8E	R2013	B C 13F	R3030	B C 16F	R3355	B C 2G	K3009	B C 2N		
C18	B C 12I	C2229	B C 10C	C4009	B C 5H	L2251	A D 11E	R2014	B C 14F	R3031	B C 16F	R3356	B C 2G	K3010	B C 2N		
C19	B C 12I	C2232	B C 9E	C4010	B C 6H	L2252	A D 10F	R2015	B C 14F	R3032	B C 16E	R3357	B C 3G	K3011	B C 1N		
C20	B C 11I	C2233	B C 9E	C4011	B C 6F	L3001	A D 18I	R2016	B C 14F	R3033	B C 16E	R3358	A D 2G	K7501	B C 20P		
C21	B C 11I	C2251	B C 11E	C4012	B C 6F	L4001	A D 12N	R2017	B C 14F	R3034	B C 16E	R3359	B C 2F	K7502	B C 21O		
C22	B C 11J	C2252	B C 11E	C4014	B C 6G	L7101	A D 20K	R2018	B C 14G	R3035	B C 16E	R3362	B C 2F	K7503	B C 21P		
C24	B C 11J	C2253	B C 11E	C4015	B C 6H	L7201	A D 19O	R2019	B C 14G	R3036	B C 16E	R3363	B C 2F	PC01288	B C 7D		
C25	A D 12J	C2254	A D 11E	C4018	B C 5F	L7501	A D 21P	R2021	B C 14E	R3038	B C 16E	R3366	B C 2F	PC3001	A D 5E		
C26	A D 11J	C2255	B C 11E	C4031	A D 11N	L7502	A D 21O	R2022	B C 12F	R3039	B C 16E	R3369	B C 3F	PC3002	A D 5K		
C27	B C 11J	C2256	B C 11E	C4032	B C 11N			R2023	B C 4D	R3040	B C 16E	R3371	B C 3F	S3001	A D 3C		
C28	B C 10J	C2257	A D 11F	C7110	B C 20K			R2051	B C 3B	R3041	B C 16D	R3372	B C 3E	T2051	A D 3B		
C29	B C 11J	C2258	B C 9F	C7111	A D 20J			R2052	B C 3B	R3042	B C 16D	R3373	B C 3E	TP106	A D 14A		
C30	A D 11I	C2259	A D 10F	C7112	B C 20K			R2053	B C 3B	R3044	B C 16D	R3374	B C 3E	TP111	A D 15A		
C31	A D 11H	C2261	B C 11E	C7116	B C 19P			R2054	B C 3C	R3046	B C 17D	R3375	B C 3E	TP2253	A D 14A		
C32	B C 11H	C2262	B C 11E	C7117	B C 19P			R2055	B C 3C	R3047	B C 17D	R3376	B C 3E	TP3401	B C 17E		
C33	A D 12J	C2601	B C 20C	C7118	B C 18P			R2056	A D 4C	R3048	B C 17E	R3377	B C 3E	TP3402	B C 17E		
C34	B C 10J	C2602	B C 21D	C7119	B C 18P			R2057	B C 4D	R3049	B C 17E	R3378	B C 3E	TP3403	B C 18D		
C35	A D 10H	C2603	A D 6B	C7201	A D 19O			R2058	B C 3D	R3050	B C 17E	R3379	B C 3E	TP3404	B C 19E		
C36	A D 10H	C2604	A D 5B	C7501	A D 20P			R2059	B C 3C	R3051	B C 17D	R3380	B C 4E	TP3405	B C 19D		
C37	B C 10G	C2605	A D 20B	C7502	B C 20P			R2060	B C 3C	R3052	B C 17D	R3381	B C 4E	TP3406	B C 18D		
C38	B C 10H	C2606	A D 20B	C7503	A D 20P			R2201	B C 11C	R3053	B C 17D	R3385	B C 4E	TP3407	B C 18E		
C39	A D 10H	C2607	A D 20B	C7504	B C 20P			R2202	B C 11C	R3054	B C 17D	R3386	B C 4E	TP3408	B C 18E		
C40	B C 11G	C2608	A D 19B	C7505	B C 21P			R2203	B C 12C	R3055	B C 18C	R3388	B C 4E	TP3901	B C 3H		
C41	B C 10G	C2609	A D 19B	C7506	B C 20P			R2204	B C 11C	R3059	B C 18D	R3390	B C 4E	TP3902	B C 3G		
C43	A D 10H	C2610	A D 19B	C7507	A D 21O			R2205	B C 12C	R3060	B C 18D	R3403	B C 5F	TP3903	B C 3F		
C44	A D 9H	C2611	A D 17B	C7508	B C 21O			R2206	B C 12C	R3061	B C 18D	R3405	B C 5F	TP3904	B C 3F		
C45	B C 9H	C2612	A D 18B	C7509	B C 21P			R2207	B C 12C	R3062	B C 18D	R3407	B C 6G	TP3905	B C 3F		
C46	B C 11G	C2613	A D 18B					R2208	B C 12C	R3063	B C 18D	R3451	B C 6I	TP3906	B C 3G		
C47	A D 11G	C2614	A D 18B	CONNECTOR				R2209	B C 8C	R3066	B C 19D	R3505	A D 7H	TP3907	B C 3G		
C48	B C 11F	C2615	A D 17B	CN1	A D 12E			R2210	B C 7C	R3069	B C 19E	R3506	B C 4N	TP3908	B C 2F		
C49	A D 9H	C2616	A D 17B	CN503	A D 17N			R2211	B C 8C	R3071	B C 19E	R3507	B C 2C	TP3910	B C 5F		
C50	B C 9H	C2617	A D 17B	CN2001	A D 14L			R2212	B C 8C	R3072	B C 20D	R3508	B C 5E	TP3911	B C 4H		
C51	B C 9J	C2618	A D 19B	CN2002	A D 11B			R2213	B C 7C	R3073	B C 20E	R3509	B C 5E	TP4001	A D 14A		
C52	B C 8K	C2651	A D 5C	CN2601	A D 10P			R2214	B C 8C	R3074	B C 19E	R3510	B C 5K	WR1	A D 12F		
C54	B C 10K	C2652	B C 5C	CN3001	A D 11N			R2215	B C 8C	R3075	B C 19E	R3511	B C 5K	WR2	A D 12N		
C55	B C 11F	C2653	A D 6B	CN3102	A D 1M			R2218	B C 9C	R3076	B C 19E	R3512	B C 6K	WR3	A D 18G		
C56	B C 12F	C2654	B C 6B	CN3103	A D 5P			R2219	B C 10C	R3077	B C 19E	R3513	B C 5I	X1	A D 11F		
C57	B C 13F	C3007	B C 17G	CN3401	A D 19C			R2220	B C 7D	R3078	B C 19E	R3514	B C 6M	X2	A D 11G		
C58	B C 13F	C3010	A D 18H	CN3901	A D 1N			R2222	B C 12D	R3079	B C 19E	R3515	B C 6M	X3001	A D 18E		
C59	B C 13F	C3011	A D 18H	CN5311	A D 17P			R2223	B C 11D	R3080	B C 19F	R3516	B C 6M	X3002	A D 19E		
C60	B C 13E	C3012	B C 16D	CN7111	A D 19P			R2224	B C 10E	R3081	B C 19F	R3517	B C 6M	X3301	A D 3F		
C61	A D 12F	C3013	B C 16D	CN7112	A D 3A			R2225	B C 10E	R3083	B C 20F	R3518	B C 16P	X3302	A D 3F		
C62	A D 12F	C3014	A D 17H	CN7113	A D 21D			R2226	B C 11C	R3085	A D 20G	R3519	B C 15O				
C63	B C 13D	C3015	B C 17G	CN7114	A D 21G			R2227	B C 11C	R3086	B C 19F	R3520	B C 5L				
C64	B C 13D	C3016	B C 17E	CN7115	A D 21J			R2228	B C 12C	R3087	B C 19F	R3522	B C 10P				
C66	B C 9J	C3017	B C 17D	CN7116	A D 19H			R2229	B C 12C	R3088	B C 19F	R3523	B C 3L				
C68	B C 14I	C3018	B C 17D	CN7117	A D 17K			R2230	B C 11C	R3089	B C 19G	R3524	B C 2L				
C71	A D 12F	C3019	B C 17C	CN7118	A D 17P			R2231	B C 10C	R3090	B C 19G	R3529	B C 3F				
C72	B C 11F	C3020	B C 17C	CN7119	A D 17J			R2232	B C 11C	R3091	B C 19G	R3530	B C 2F				
C73	B C 10J	C3021	B C 17D					R2233	B C 11C	R3092	B C 19G	R3531	B C 2F				
C74	B C 10J	C3022	B C 20H					R2234	B C 9C	R3093	B C 19G	R3535	B C 1D				
C75	B C 9J	C3024	B C 18E	D1	A D 14E			R2239	B C 9E	R3094	B C 19H	R3536	B C 2D				
C85	A D 13J	C3025	A D 19E	D2	A D 14D			R2240	B C 9E	R3095	B C 18H	R3537	B C 3D				
C201	A D 17L	C3026	B C 19D	D3	A D 13I			R2241	B C 8D	R3096	B C 18H	R3541	B C 2D				
C202	B C 17L	C3027	A D 19D	D4	A D 13I			R2242	B C 9D	R3098	B C 19G	R3552	B C 12N				
C204	B C 17M	C3028	B C 18D	D201	B C 18M			R2243	B C 8D	R3107	B C 18G	R3553	B C 11N				
C206	B C 17M	C3029	B C 18D	D202	B C 18M			R2244	B C 9D	R3108	B C 18G	R3554	B C 4J				
C207	B C 18M	C3030	A D 19E	D203	B C 18M			R2251	B C 10F	R3213	B C 15M	R3555	B C 4O				
C208	B C 18M	C3031	B C 19E	D2001	A D 4D			R2252	B C 9F	R3214	B C 16D	R3564	B C 2G				
C209	B C 18L	C3032	B C 19F	D2201	A D 7D			R2253	B C 9F	R3218	B C 16P	R4001	B C 6F				
C210	B C 18M	C3033	B C 18G	D2251	A D 9F			R2255	B C 9E	R3219	B C 16O	R4003	B C 5G				
C211	B C 18M	C3034	B C 20E	D2601	A D 7C			R2257	B C 10F	R3220	A D 16D	R4004	B C 5G				
C212	B C 19M	C3035	B C 20E	D3002	A D 14E			R2601	B C 20B	R3223	B C 18H	R4005	B C 6H				
C213	A D 19M	C3036	B C 19E	D3003	A D 16P			R2602	B C 20C	R3224	B C 18H	R4007	B C 5H				
C214	B C 18M	C3037	B C 19E	D3004	A D 16I			R2603	B C 20C	R3225	B C 17C	R4008	B C 4I				
C215																	

■ JACK, DEMOD, OPERATION/JACK, SWITCH/DISPLAY AND SECAM CIRCUIT BOARDS

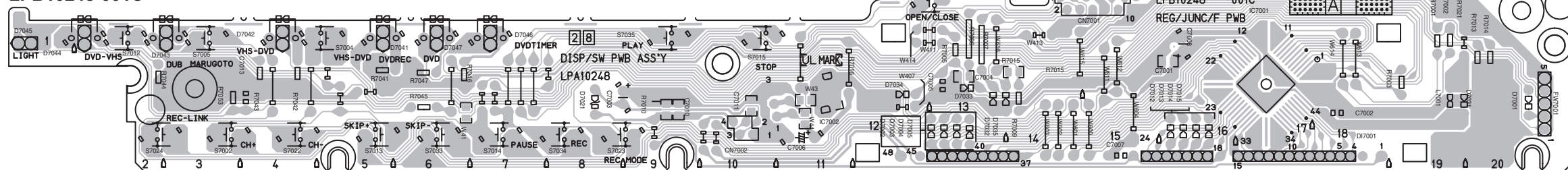


COMPONENT PARTS LOCATION GUIDE <DEMOMD> LPB10094-001C

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C301	B C 7B	C320	C 8B	CONNECTOR				R308	C 5B	R4305	B C 2C
C302	A D 7C	C321	B C 7B	CN301	A D 5C	TRANSISTOR		R309	C 6B	R4306	B C 2C
C303	C 7B	C322	B C 6B	CN4302	A D 4D	Q301	B C 6C	R310	B C 6B	R4307	B C 2C
C304	B C 7B	C323	A D 7C			Q302	B C 8C	R311	B C 6B	R4308	B C 2C
C305	B C 6B	C4301	C 7C	DIODE		Q311	B C 6C	R312	C 7A	R4309	B C 2C
C307	B C 6B	C4302	A D 3A	D4301	A D 4A	Q312	B C 7C	R313	C 7B	R4310	B C 2C
C308	B C 6B	C4303	C 2C			Q4301	B C 2C	R314	C 7B	R4311	B C 2C
C309	B C 6B	C4304	C 2B	IC		Q4302	B C 2C	R315	B C 7B	R4312	B C 2C
C310	B C 5B	C4305	B C 2B	IC301	A D 7B	Q4303	B C 3C	R316	C 8B	R4317	B C 2C
C311	B C 5B	C4306	B C 3B	IC4301	B C 4C	RESISTOR		R321	C 7C	R4318	B C 2C
C312	B C 5B	C4307	C 3C	IC4304	B C 3B	R301	B C 7B	R327	B C 7B	R4319	B C 2C
C313	A D 5B	C4308	B C 3C			R302	B C 7C	R328	C 7A	R4320	B C 2C
C314	C 6B	C4309	B C 4C	COIL		R303	B C 6B	R329	B C 7B		
C315	A D 5A	C4310	B C 3B	L301	A D 6C	R304	B C 6C	R4301	B C 2C		
C316	C 6A	C4311	B C 4C	L302	A D 6C	R305	B C 6C	R4302	B C 2C		
C317	B C 6B	C4318	B C 3B	L303	A D 6B	R306	B C 6B	R4303	B C 2C		
C318	B C 7B	C4319	B C 3A	L4301	A D 3D						



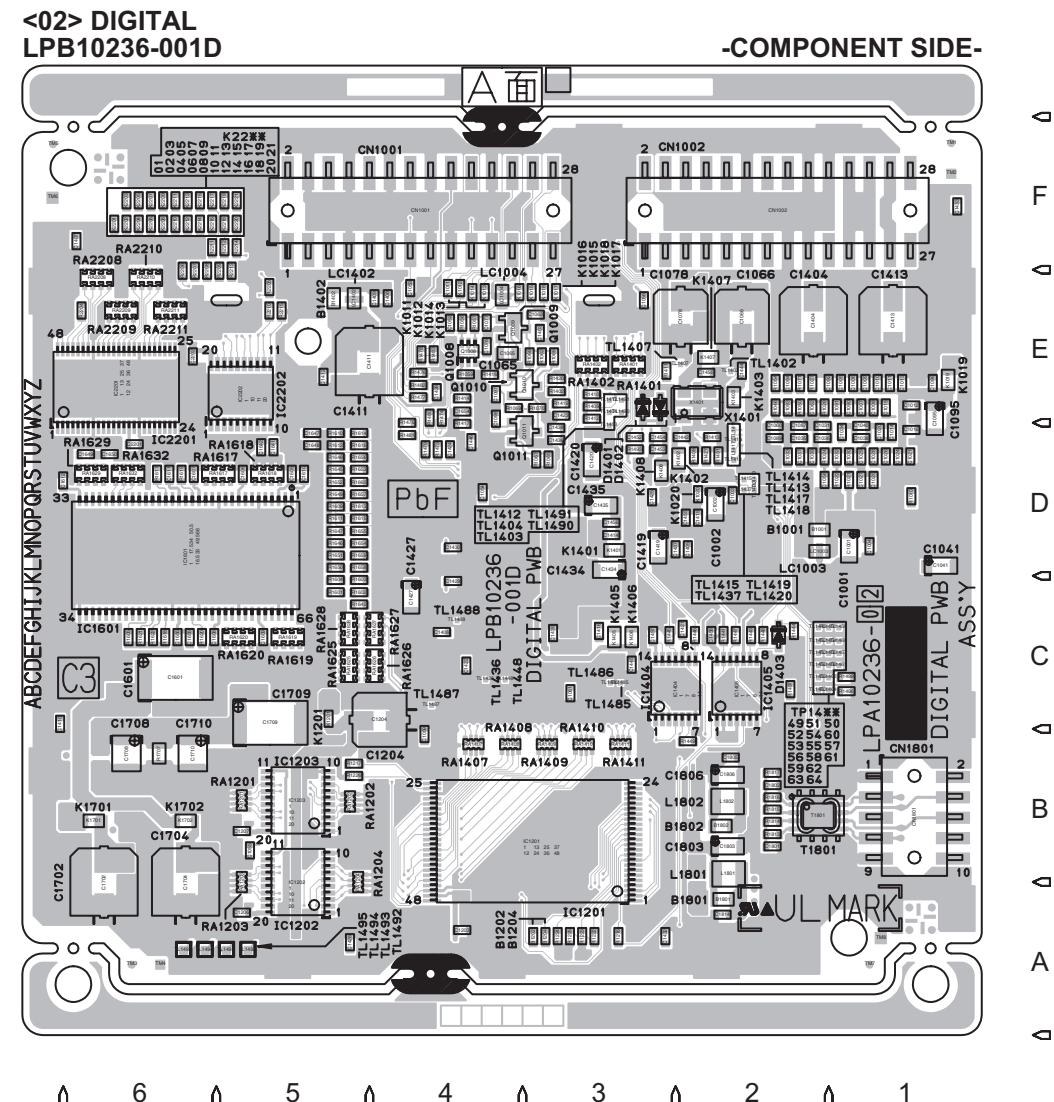
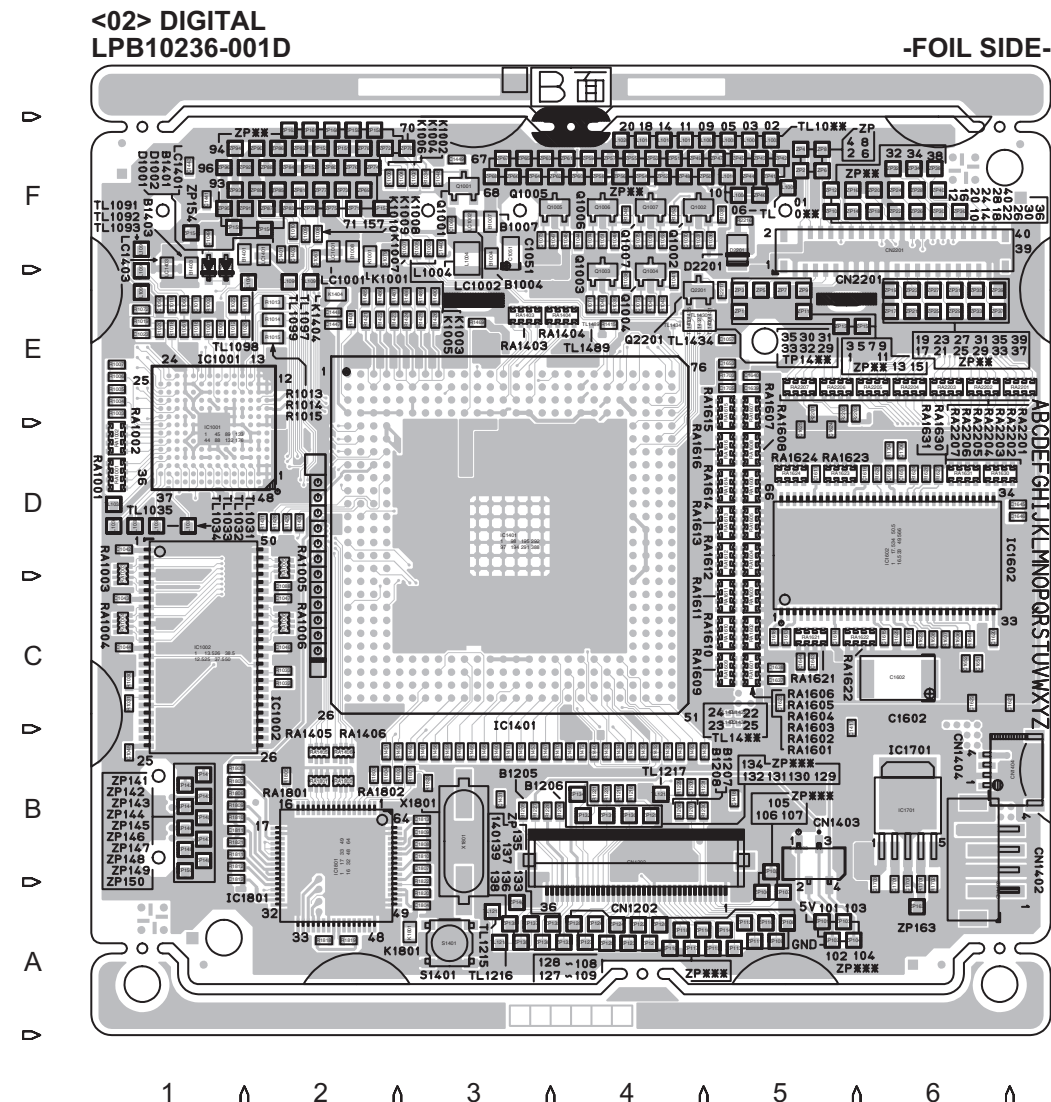
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C7201	A	D 5A	CONNECTOR			D7221	A	D 8B	L7204	A	D 7B	R7224	B	C 4C
C7202	B	C 3B	CN7201	A	D 7B	D7222	A	D 2C				R7225	A	D 8C
C7203	A	D 5B	CN7202	A	D 1A	D7223	A	D 3C	RESISTOR					
C7204	B	C 2B				D7224	A	D 4C	R7201	A	D 5A	OTHER		
C7205	A	D 5B	DIODE			COIL			R7206	B	C 6A	J7201	A	D 3B
C7206	B	C 7B	D7202	A	D 5A	L7201	A	D 3A	R7207	B	C 6B	J7204	A	D 6B
C7207	B	C 2B	D7203	A	D 5A	L7202	A	D 5A	R7221	A	D 7B	S7216	A	D 7C
C7221	A	D 8C	D7204	A	D 7A	L7203	A	D 1B	R7222	B	C 2B	S7217	A	D 5C
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COMPONENT PARTS LOCATION GUIDE <SWITCH/DISPLAY> LPB10248-001C

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C7001	B C 16B	CN7001	A D 14C	D7021	A D 8B			R7006	A D 13B	R7045	A D 6A	S7014	A D 7				
C7002	A D 18A	CN7002	A D 10A	D7031	A D 19B	IC		R7007	A D 13B	R7046	A D 6B	S7015	A D 10				
C7003	A D 8B			D7032	A D 13B	IC7001	B C 17B	R7009	A D 14B	R7047	A D 6B	S7022	A D 4				
C7004	A D 13B			D7033	A D 13B	IC7002	A D 11B	R7010	B C 17B	R7048	A D 3A	S7023	A D 6				
C7005	A D 13B	D7001	A D 20B	D7034	A D 12B			R7013	A D 20B			S7024	A D 2				
C7006	A D 11A	D7002	A D 13A	D7035	A D 13A	COIL		R7014	A D 20B	OTHER		S7027	A D 13				
C7007	A D 15A	D7003	A D 13A	D7041	A D 5B	L7001	A D 19A	R7015	B C 14B	DI7001	A D 15B	S7033	A D 6				
C7008	A D 16B	D7004	A D 13A	D7042	A D 4B			R7016	A D 11B	FW7001	A D 21A	S7034	A D 8				
C7010	B C 9A	D7005	A D 13A	D7043	A D 3B	RESISTOR		R7021	A D 19B	S7002	A D 3A	S7035	A D 9				
C7011	B C 10A	D7012	A D 16A	D7044	A D 1B	R7001	A D 19B	R7041	A D 6B	S7004	A D 5B						
C7013	A D 4A	D7013	A D 16A	D7045	A D 1B	R7002	A D 19B	R7042	A D 4B	S7005	A D 3B						
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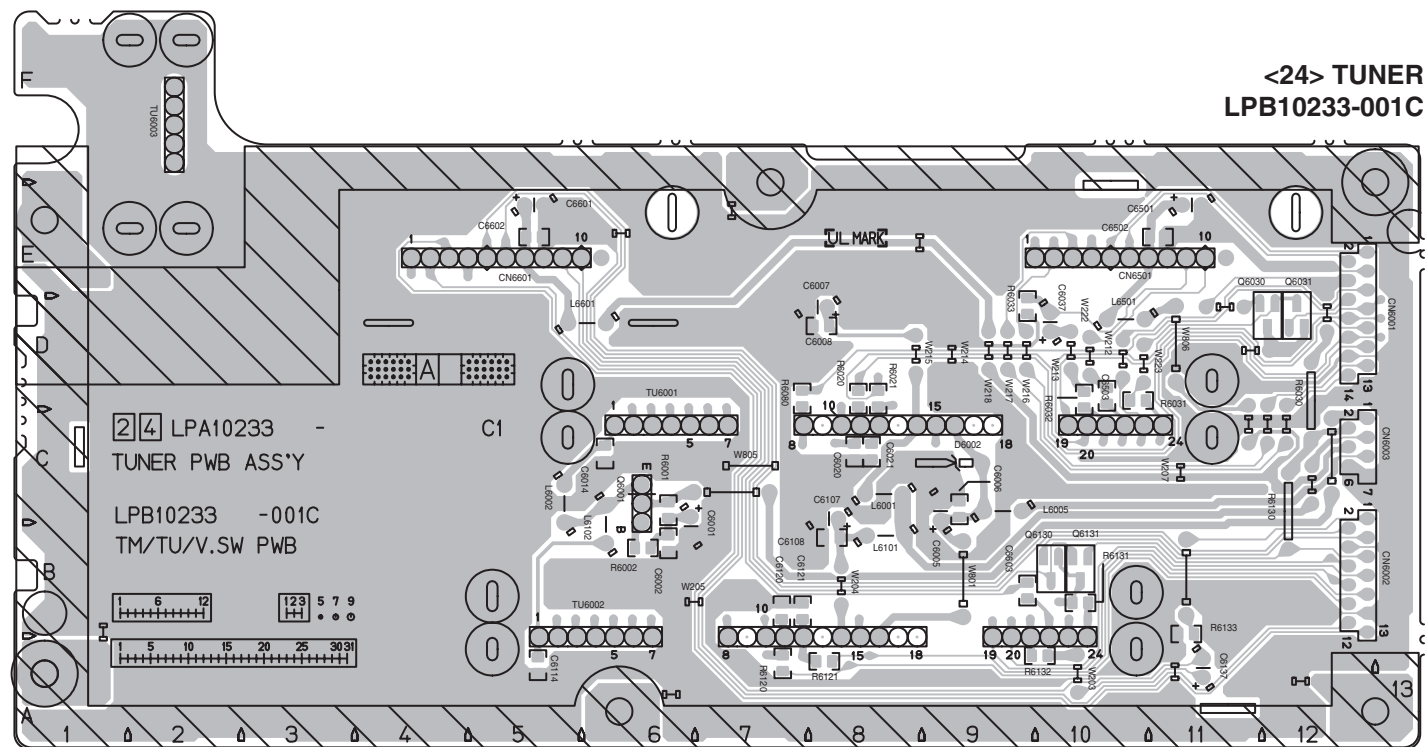
■ DIGITAL CIRCUIT BOARD



COMPONENT PARTS LOCATION GUIDE <DIGITAL> LPB10236-001D

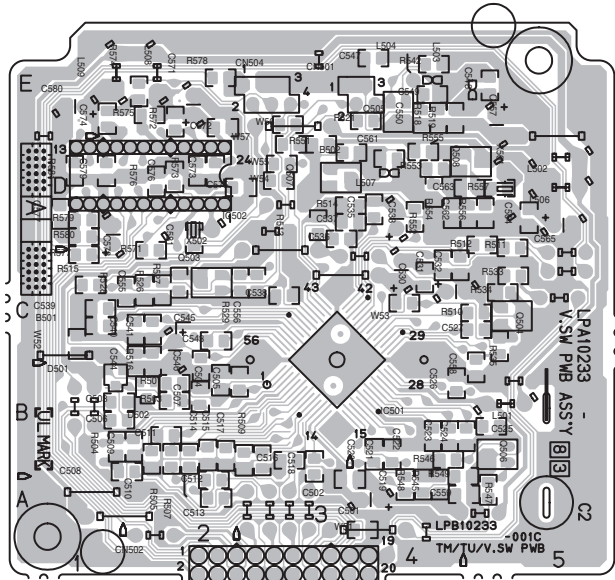
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■ VIDEO SW, TUNER AND TERMINAL CIRCUIT BOARDS



<24> TUNER
LPB10233-001C

<83> VIDEO SW
LPB10233-001C

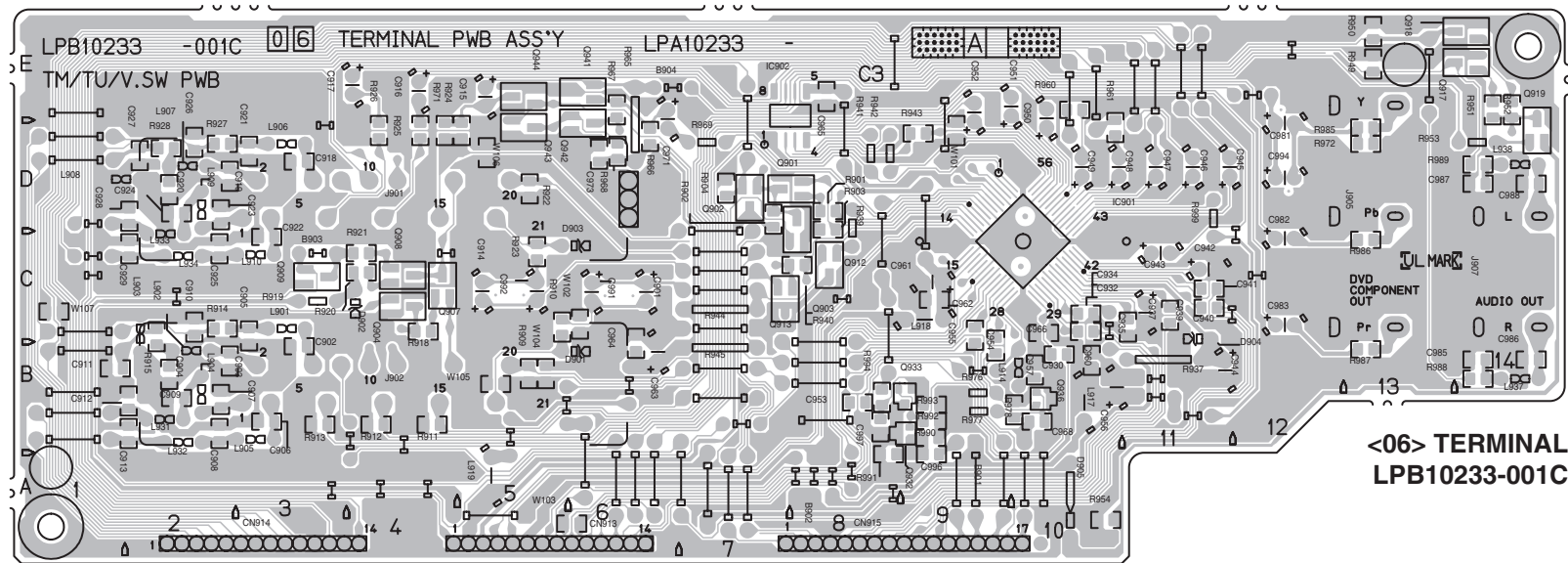


COMPONENT PARTS LOCATION GUIDE <TUNER> LPB10233-001C

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		DIODE		Q6130	B C 10B	R6131	B C 10B		
C6001	A D 6C	D6002	A D 8C	Q6131	B C 10B	R6132	B C 10A		
C6002	B C 6B					R6133	B C 11B		
C6005	A D 9C	COIL		RESISTOR					
C6006	B C 9C	L6001	A D 8C	R6001	B C 6C	OTHER			
C6007	A D 8D	L6002	A D 5C	R6002	B C 6B	TU6001	A D 5D		
C6008	B C 8D	L6005	A D 9C	R6020	B C 8D	TU6002	A D 5B		
C6014	B C 6C	L6101	A D 8B	R6021	B C 8D				
C6020	B C 8C	L6102	A D 6B	R6030	A D 12C				
C6021	B C 8C	CN6001	A D 12E	R6031	B C 10D				
C6037	A D 10D	CN6002	A D 12C	R6032	B C 10D				
C6107	A D 8C	CN6003	A D 12C	R6033	B C 9D				
C6108	B C 8B	CN6501	A D 10E	R6080	B C 7D				
C6114	B C 5A	CN6601	A D 4E	R6120	B C 7A				
C6120	B C 7B			R6121	B C 8A				
C6121	B C 7B			R6130	A D 12C				

COMPONENT PARTS LOCATION GUIDE <TUNER> LPB10233-001C

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		CONNECTOR		DIODE		TRANSISTOR		OTHER	
C501	A D 4A	CN501	A D 3E	D501	B C 1B	Q503	B C 2C	X501	A D 5D
C502	B C 4A	CN502	A D 2A	D502	B C 2B	Q504	B C 5C	X502	A D 2D
C503	B C 1B	CN504	A D 3E			Q505	B C 4E		
C504	B C 2B			IC		Q506	B C 5B		
C505	B C 3B			IC501	B C 3C	Q507	B C 3D		
C506	B C 1B			IC502	A D 2D	Q508	B C 5D		
C507	B C 2B			COIL					
C508	B C 2B			L501	A D 5B				
C509	B C 2B			L502	A D 6D				
C510	B C 2B			L503	A D 5E				
C511	B C 2B			L504	A D 4E				
C512	B C 2A								
C513	B C 2A								
C514	B C 2B								
C515	B C 2B								
C516	B C 3B								
C517	B C 3B								



<06> TERMINAL
LPB10233-001C

COMPONENT PARTS LOCATION GUIDE <TERMINAL> LPB10233-001C

REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION	REF.NO.	LOCATION
CAPACITOR		CONNECTOR		DIODE		TRANSISTOR		OTHER	
C901	A D 6C	CN901	A D 7A	D901	A D 6B	Q901	B C 8D	X901	A D 7D
C902	B C 3B	CN902	A D 4A	D902	A D 4C	Q902	B C 7D	X902	A D 4D
C903	B C 2B	CN903	A D 2A	D903	A D 6C	Q903	B C 8D	X903	A D 4D
C904	B C 2B	CN904	A D 2A	D904	A D 6C	Q904	B C 8D	X904	A D 4D
C905	B C 3C	CN905	A D 7A	D905	A D 10A	Q905	B C 8D	X905	A D 4D
C906	B C 3B					Q906	B C 8D	X906	A D 4D
C907	B C 2B					Q907	B C 8D	X907	A D 4D
C908	B C 2B					Q908	B C 8D	X908	A D 4D
C909	B C 2B					Q909	B C 8D	X909	A D 4D
C910	B C 2C					Q910	B C 8D	X910	A D 4D
C911	B C 1B					Q911	B C 8D	X911	A D 4D
C912	B C 2B					Q912	B C 8D	X912	A D 4D
C913	B C 2B					Q913	B C 8D	X913	A D 4D
C914	A D 5C					Q914	B C 8D	X914	A D 4D
C915	A D 5E					Q915	B C 8D	X915	A D 4D
C916	A D 4E					Q916	B C 8D	X916	A D 4D
C917	A D 4E					Q917	B C 8D	X917	A D 4D
C918	B C 3D					Q918	B C 8D	X918	A D 4D
C919	B C 2D					Q919	B C 8D	X919	A D 4D
C920	B C 2D					Q920	B C 8D	X920	A D 4D
C921	B C 3D					Q921	B C 8D	X921	A D 4D
C922	B C 3C					Q922	B C 8D	X922	A D 4D
C923	B C 2D					Q923	B C 8D	X923	A D 4D
C924	B C 2D					Q924	B C 8D	X924	A D 4D

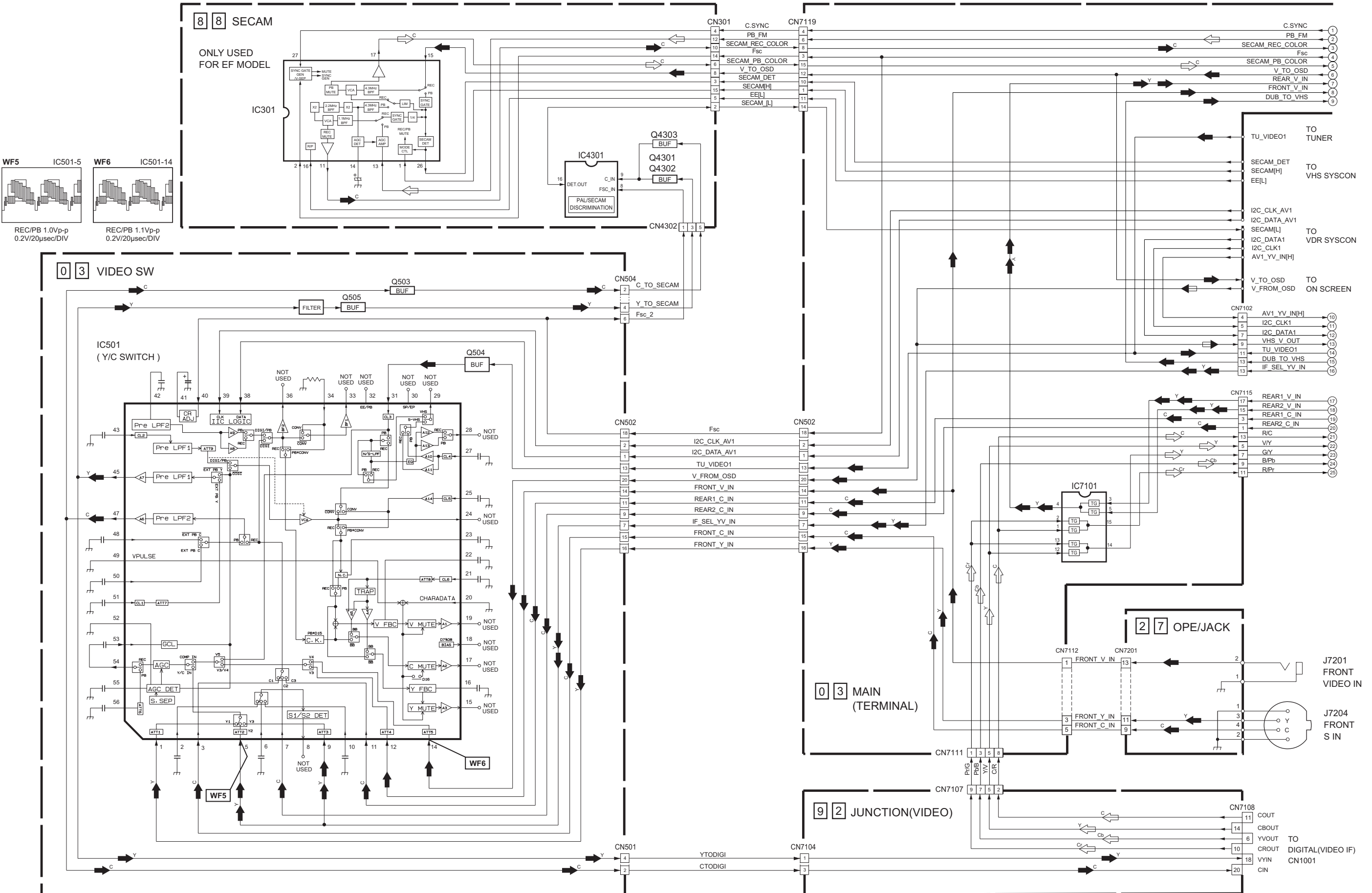
■ VOLTAGE CHARTS

<MAIN>			
MODE PIN NO.	REC	PLAY	
IC5101			
1	304.5	305.5	
2	0	0	
3	0	0	
4	17.2	17.2	
5	2.5	2.5	
IC5301			
6	2.5	2.6	
7	2.7	2.8	
8	1.8	1.3	
9	1.9	1.2	
IC5302			
10	2.3	1.9	
11	2.6	3.0	
2	2.0	2.0	
3	0	0	
4	1.2	1.2	
5	4.9	4.9	
Q5304			
1(E)	0	0	
2(B)	4.9	4.9	
3(C)	29.2	29.1	
4(E)	29.2	29.1	
5(B)	0	0	
6(C)	0	0	
QS305			
E	10.7	10.7	
C	12.0	12.1	
B	11.4	11.4	
Q5306			
E	5.0	5.1	
C	5.8	5.8	
B	5.7	5.7	
Q5307			
E	11.1	11.2	
C	11.2	11.2	
B	10.5	10.5	
Q5308			
E	0	0	
C	0	0	
B	4.9	4.9	
Q5313			
E	13.5	13.5	
C	13.5	13.5	
B	12.8	12.8	
Q5314			
E	5.3	5.3	
C	5.3	5.2	
B	4.6	4.6	
Q5315			
E	0	0	
C	0	0	
B	4.9	4.9	
CN5302			
1	11.2	11.2	
2	0	0	
CN5303			
1	13.5	13.5	
2	0	0	
3	0	0	
4	5.2	5.2	

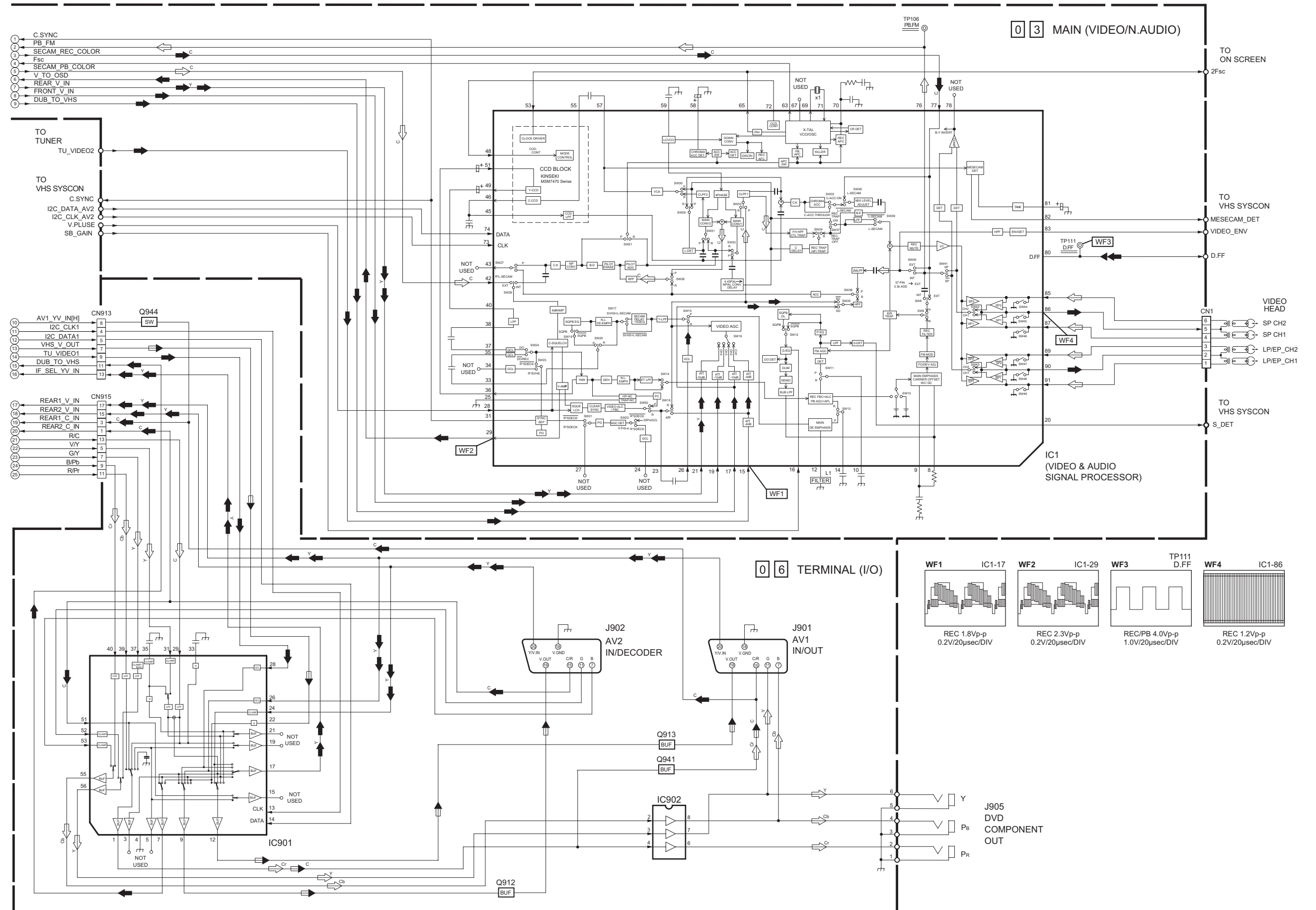
<MAIN>			
MODE PIN NO.	REC	PLAY	
IC1			
1	0	0	
2	0	0	
3	0	0	
4	4.9	5.0	
5	2.0	2.0	
6	2.5	2.6	
7	2.7	2.8	
8	1.8	1.3	
9	1.9	1.2	
10	2.3	1.9	
11	2.6	3.0	
12	1.5	0.5	
13	0	0	
14	2.7	2.2	
15	2.7	2.8	
16	0	3.4	
17	2.8	2.9	
18	1.9	1.9	
19	2.8	2.8	
20	0	0	
21	2.8	2.8	
22	4.9	5.0	
23	2.3	2.3	
24	0	0.5	
25	0	0	
26	2.9	2.8	
27	0.2	0.5	
28	0	0	
29	2.4	2.4	
30	2.8	2.9	
31	0.2	0.2	
32	2.4	2.5	
33	2.0	2.0	
34	1.7	1.8	
35	3.0	3.1	
36	2.3	2.3	
37	3.0	3.0	
38	2.1	0.1	
39	1.4	0	
40	2.8	2.7	
41	2.8	2.1	
42	1.9	0	
43	2.0	0	
44	0	0	
45	3.1	3.1	
46	3.1	3.1	
47	5.0	5.0	
48	0	0	
49	3.1	3.1	
50	5.0	5.0	
51	1.8	1.8	
52	4.9	5.0	
53	2.6	2.7	
54	0	0	
55	1.7	1.9	
56	0	0	
57	2.2	2.2	
58	2.3	2.3	
59	5.0	5.0	
60	4.9	4.9	
61	0	0	
62	2.1	2.2	
63	2.2	2.2	
64	2.6	2.6	
65	2.2	2.3	
66	2.6	2.6	
67	0.1	0.2	
68	1.2	1.2	
69	1.9	1.9	
70	0	1.5	
71	2.2	2.2	
72	0	0	
73	4.9	4.9	
74	4.8	4.8	
75	2		

<MAIN>			
MODE PIN NO.	REC	PLAY	
IC2603			
1	0	0	
2	0	0	
3	0	0	
4	-7.6	-7.7	
5	0	0	
6	0	0	
7	0	0	
8	10.7	10.7	
IC2604			
1	0	0	
2	0	0	
3	0	0	
4	0	0	
5	0	0	
6	0	0	
7	-7.6	-7.5	
8	0	0	
9	5.0	5.0	
10	0	0	
11	0	0	
12	0	0	
13	0	0	
14	0	0	
15	0	0	
16	6.2	6.2	
IC2605			
1	0	0	
2	0	0	
3	0	0	
4	-7.5	-7.5	
5	0	0	
6	0	0	
7	0	0	
8	10.5	10.7	
IC2606			
1	7.0	7.0	
2	0	0	
3	7.0	7.0	
4	5.0	5.0	
5	6.3	6.4	
6	0	0	
7	6.4	6.4	
8	5.0	5.0	
9	7.0	7.0	
10	10.7	10.7	
11	7.0	7.0	
12	0	0	
IC2607			
1	7.0	7.0	
2	0	0	
3	7.0	7.1	
4	0	0	
5	6.4	6.4	
6	0	-0.1	
7	6.3	6.4	
8	0	0	
9	7.0	7.0	
10	10.7	10.7	
11	7.0	7.0	
12	0	0	
IC3001			
1	0	0	
2	0	0	
3	1.6	1.7	
4	0	0	
5	0.1	0.1	
6	0	0.9	
7	4.3	4.1	
8	0	0	
9	5.0	5.1	
10	5.0	5.0	
11	0	0	
12	0	0	
13	0	0	
14	0	0	
15	0	0	
16	0	0	
17	0	0	
18	0	0	
19	0	0	
20	2.7	2.7	
21	2.3	2.3	
22	0	0	
23	0	0	
24	0	0	
25	0	0	
26	4.4	4.4	
27	0	0	
28	0	0	
29	4.9	4.8	
30	4.4	0	
31	5.0	5.1	
32	0	0	
33	0	0	
34	0	0	
35	4.9	4.9	
36	0	4.9	
37	0	0	
38	4.4	4.1	
39	4.1	4.1	
40	0	0	
41	0	0	
42	0	0	
43	0	0	
44	0	0	
45	0	0	
46	0	0	
47	0	0	
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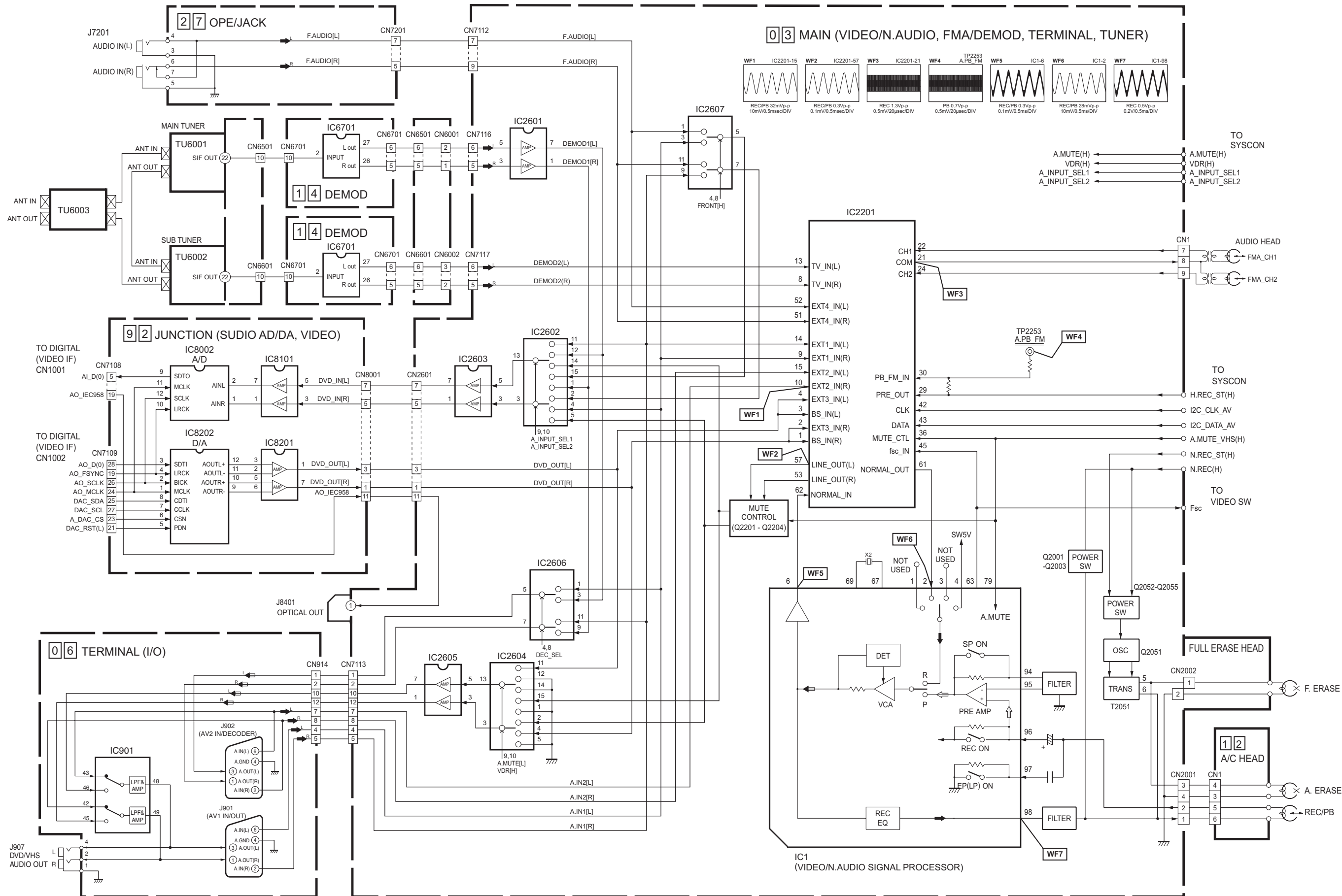
■ VIDEO BLOCK DIAGRAM(1)



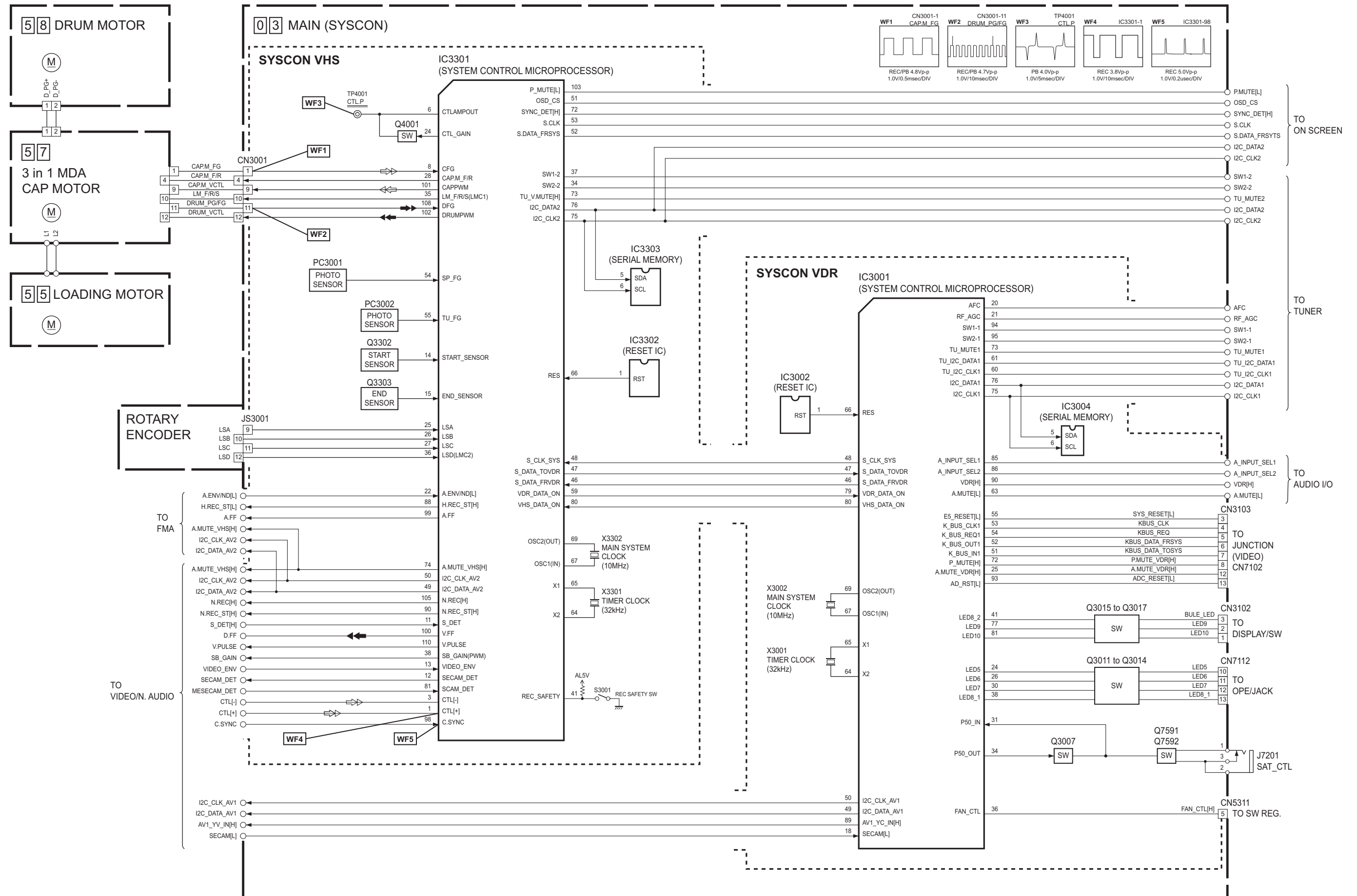
VIDEO BLOCK DIAGRAM(2)



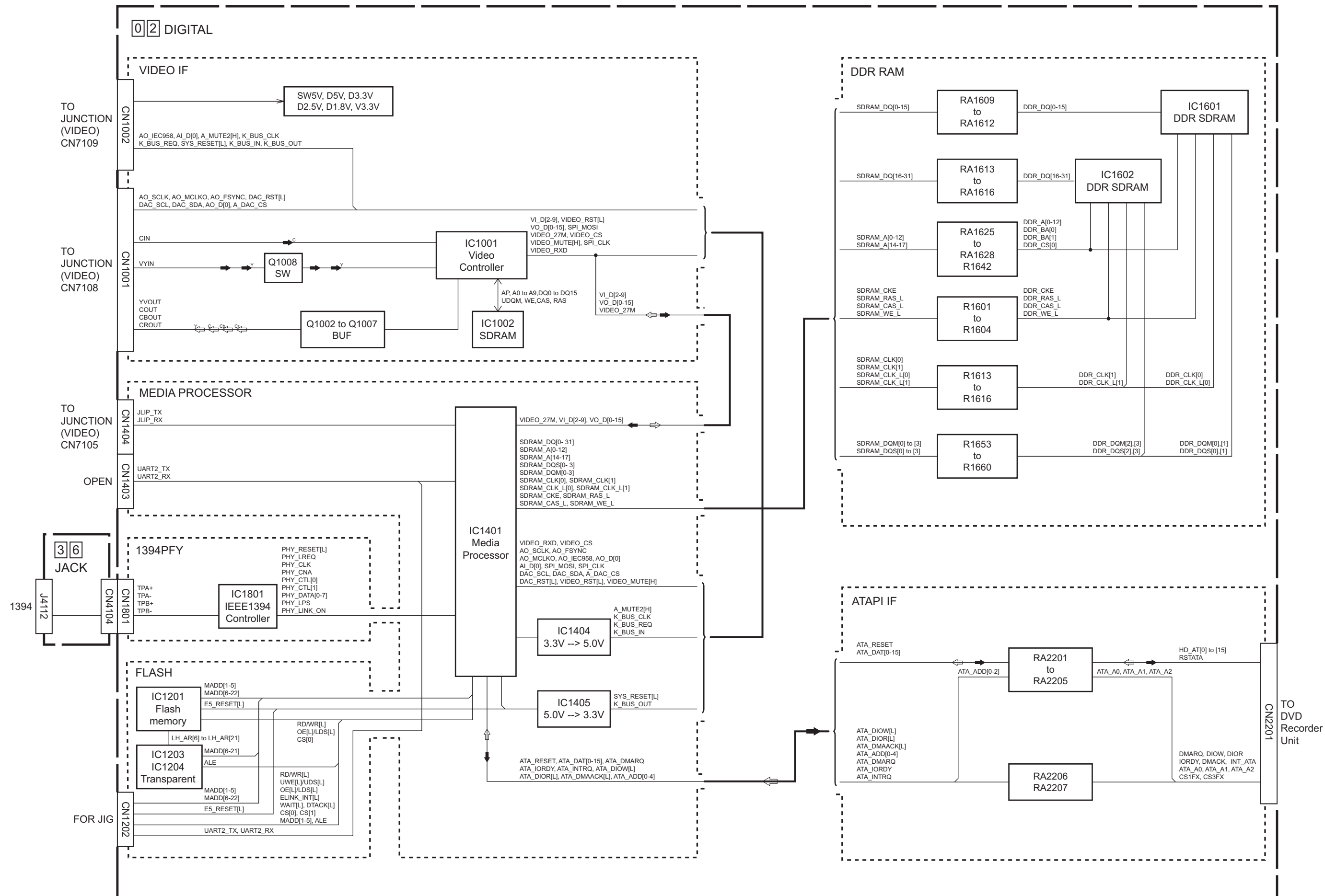
AUDIO BLOCK DIAGRAM



SYSTEM CONTROL BLOCK DIAGRAM



DIGITAL BLOCK DIAGRAM



CPU PIN FUNCTION

<VHS SYSCON IC3301>

PIN NO.	LABEL	IN/OUT	FUNCTION
1	CTL[+]	IN/OUT	CTL(+) SIGNAL
2	SVss	-	GND
3	CTL[-]	IN/OUT	CTL(-) SIGNAL
4	CTLBias	-	CTL BIAS VOLTAGE
5	CTLFB	IN	CTL PULSE FEEDBACK
6	CTLAMPOUT	OUT	CTL PULSE OUTPUT
7	CTLSMTIN	IN	CTL PULSE OUTPUT
8	CFG	IN	CAPSTAN FG PULSE INPUT
9	SVcc	-	SYSTEM POWER
10	Avcc	-	SYSTEM POWER
11	NORM/MESEC/S_DET	IN	SQPB:H/MESECAM:M/NORMAL:L
12	SECAN_DET	IN	SECAN MODE DETECT
13	VIDEO_ENV	IN	AUTO TRACKING DETECT/INPUT THE AVERAG OF PLAYBACK VIDEO SIGNAL
14	START_SENSOR	IN	START SENSOR
15	END_SENSOR	IN	END SENSOR
16	NC	-	NOT USED
17	PROTECT	IN	DETECTION SIGNAL FOR SWITCHING POWERSUPPLY
18	TEST	-	NOT USED
19	NC	-	NOT USED
20	NC	-	NOT USED
21	NC	-	NOT USED
22	A.ENV/ND[L]	IN	AUDIO PB FM ENV.INPUT/NON HiFi MODE:L
23	Avss	-	GND
24	CTL_GAIN/TEST	OUT	CONTROL AMP OUT FREQUENCY RESPONSE SWITCHIN
25	LSA	IN	MECHANISM MODE DETECT (A)
26	LSB	IN	MECHANISM MODE DETECT (B)
27	LSC	IN	MECHANISM MODE DETECT(C)
28	CAP.M_F/R	OUT	CAPSTAN MOTOR REVERSE CONTROL (FWD:L/REV:H)
29	NC	-	NOT USED
30	VHS_AV1[H]	OUT	VHS_AV1 MODE : H
31	NC	-	NOT USED
32	NC	-	NOT USED
33	NC	-	NOT USED
34	SW2-2	OUT	TV RF SYSTEM SELECT
35	LM_F/R/S[LMC1]	OUT	LOADING MOTOR DRIVE
36	LSD[LMC2]	IN	MECHANISM MODE DETECT (D)
37	SW1-2	OUT	TV RF SYSTEM SELECT
38	SB_GAIN[PWM]	OUT	VOLTAGE CONTROL SIGNAL FOR VIDEO FREQUENCY RESPONSE
39	NC	-	NOT USED
40	POWER_DET	IN	DETECTION SIGNAL FOR POWER DOWN OF AC POWER SUPPLY
41	NC	-	NOT USED
42	P.SAVE[L]	OUT	POWER SAVE MODE : L
43	Vss	-	GND
44	NC	-	NOT USED
45	Vcc	-	SYSTEM POWER
46	S_DATA_FRVDR	OUT	SERIAL DATA TRANSFER OUTPUT FROM THE THE VDR SYSCON CPU
47	S_DATA_TOVDR	IN	SERIAL DATA TRANSFER OUTPUT TO THE VDR SYSCON CPU
48	S_CLK_SYS	OUT	SERIAL DATA TRANSFER CLOCK FOR VDR SYSCON CPU
49	12C_DATA_AV2	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR A/V IC
50	12C_CLK_AV2	OUT	SERIAL DATA TRANSFER CLOCK FOR A/V IC
51	OSD_CS	OUT	ON-SCREEN IC CHIP SELECT
52	S.DATA_FRSYS	OUT	SERIAL DATA TRANSFER OUTPUT FROM THE FDP DRIVER TO THE ON-SCREEN
53	S.CLK	OUT	SERIAL DATA TRANSFERMER CLOCKFOR ONSCREEN IC
54	SP_FG	IN	DETECTION SIGNAL FOR SUPPLY REEL ROTATION/TAPE REMAIN
55	TU_FG	IN	DETECTION SIGNAL TAKE-UP REEL ROTATION/TAPE REMAIN
56	NC	-	NOT USED

PIN NO.	LABEL	IN/OUT	FUNCTION
57	NC	-	NOT USED
58	REC_SAFTY	IN	REC SAFETY SWITCH DETECT (SW ON:L)
59	VDR_DATA_ON	OUT	SERIAL DATA TRANSFER REQUEST TO VDR SYSCON CPU
60	NC	-	NOT USED
61	NC	-	NOT USED
62	FWE	-	FLASH WRITE ENABLE
63	NMI	-	NOT USED
64	X2	-	TIMER CLOCK(32kHz)
65	X1	-	TIMER CLOCK(32kHz)
66	RES	-	RESET TERMINAL(RESET ON:L)
67	OSC1[IN]	IN	MAIN SYSTEM CLOCK(10MHz)
68	Vss	-	GND
69	OSC2[OUT]	IN	MAIN SYSTEM CLOCK(10MHz)
70	Vcc	-	SYSTEM POWER
71	MODE	-	NOT USED
72	SYNC_DET[H]	IN	DETECTION OF VIDEO SYNC SIGNAL (DETECTED : H)
73	TU_V.MUTE[H]	OUT	TUNER VIDEO SIGNAL MUTE : H
74	A.MUTE_VHS[H]	OUT	AUDIO MUTE CONTROL FOR VHS(MUTE:H)
75	12C_CLK2	OUT	SERIAL DATA TRANSFER CLOCK FOR MEMORY IC
76	12C_DATA2	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC
77	SECAN[H]	IN	SECAN MODE :H
78	P.ON_PULSE	OUT	POWER ON/OFF PULSE OUTPUT
79	PAL_PB[H]	IN	PAL FM (PB ON:H)
80	VHS_DATA_ON	IN	SERIAL DATA TRANSFER REQUEST TO VHS SYSCON CPU
81	MESECAN_DET	OUT	MESECAM:H
82	Vcc	-	SYSTEM POWER
83	NC	-	NOT USED
84	Vss	-	GND
85	SP_SHORT[H]	OUT	MODE SELECT
86	LP_SHORT[H]	OUT	MODE SELECT
87	NC	-	NOT USED
88	H.REC_ST[H]	OUT	HiFi AUDIO SOUND RECORDING START
89	NC	-	NOT USED
90	N.REC_ST[H]	OUT	NORMAL AUDIO SOUND RECORDINGSTART
91	NC	-	NOT USED
92	NC	-	NOT USED
93	NC	-	NOT USED
94	NC	-	NOT USED
95	NC	-	NOT USED
96	NC	-	NOT USED
97	NC	-	NOT USED
98	C.SYNC	IN	COMPOSITE SYNC INPUT
99	A.FF	OUT	AUDIO FF OUTPUT
100	V.FF	OUT	ROTATION DETECTION SIGNAL FOR DRUM MOTOR/ TIMING CONTROL SIGNAL FOR REC
101	CAPPWM	OUT	CAPSTAN MOTOR CONTROL
102	DRUMPWM	OUT	DRUM MOTOR CONTROL
103	P.MUTE[L]	OUT	PICTURE MUTE CONTROL (MUTE ON : L)
104	NC	-	NOT USED
105	N_REC[H]	OUT	NORMAL AUDIO REC MODE CONTROL SIGNAL (REC:H)
106	NC	-	NOT USED
107	EE[L]	OUT	EE MODE:L
108	DFG	IN	DRUM FG PULSE INPUT
109	Vcc	-	SYSTEM POWER
110	V.PULSE	OUT	V.PULSE ADDITION TIMING CONTROL
111	Vss	-	GND
112	CTLREF	-	CTL REFERENCE VOLTAGE

CPU PIN FUNCTION

<VDR SYSCON IC3001>

PIN NO.	LABEL	IN/OUT	FUNCTION
1	NC	-	NOT USED
2	SVss	-	GND
3	NC	-	NOT USED
4	NC	-	NOT USED
5	NC	-	NOT USED
6	NC	-	NOT USED
7	NC	-	NOT USED
8	NC	-	NOT USED
9	SVcc	-	SYSTEM POWER
10	Avcc	-	SYSTEM POWER
11	NC	-	NOT USED
12	NC	-	NOT USED
13	NC	-	NOT USED
14	NC	-	NOT USED
15	NC	-	NOT USED
16	NC	-	NOT USED
17	TEST	-	NOT USED
18	SECAM[L]	IN	SECAM MODE : L
19	NC	-	NOT USED
20	AFC1	OUT	TUNING CHECK
21	RF_AGC	IN	CHANGES IN ATSHC OUTPUT AS CAUSED BY CHANGES IN RECEIVER SENSITIVITY WHEN RHE SAME CHANNEL IS RECEIVED MORE ARE INPUT.
22	SCR_ID	IN	SCRAMBLE CONTROL INPUT (SCRAMBLE : H)
23	Avss	-	GND
24	LED5[VHS_TIMER]	OUT	VHS TIMER SAND-BY LED ON/OFF CONTROL
25	A.MUTE_VDR[H]	OUT	AUDIO MUTE CONTROL FOR VDR (MUTE ON : H)
26	LED6[VHS]	OUT	VHS LED ON/OFF CONTROL
27	NC	-	NOT USED
28	NC	-	NOT USED
29	RC_IN	IN	REMOTE CONTROL DATA INPUT
30	LED7[VHS_REC]	OUT	VHS REC LED ON/OFF CONTROL
31	P50_IN	IN	CONTROL SIGNAL FOR TV LINK
32	COMPU_IN	IN	AV COMPLINK INPUT
33	COMPU_OUT	OUT	AV COMPLINK OUTPUT
34	P50_OUT	OUT	CONTROL SIGNAL FOR TV LINK
35	P.CTL1[H]	OUT	CONTROL SIGNAL FOR SWITCHING POWER SUPPLY
36	FAN_CTL	OUT	FAN MOTOR ON/OFF CONTROL
37	NC	-	NOT USED
38	LED8_1[BLUE]	OUT	ILLUMINATION LED CONTROL
39	STB	OUT	STROBE SIGNAL
40	POWER_DET	IN	DETECTION SIGNAL FOR POWER DOWN OF AC POWER SUPPLY
41	LED8_2[BLUE]	OUT	ILLUMINATION LED CONTROL
42	PROTECT	IN	DETECTION SIGNAL FOR SWITCHING POWER SUPPLY
43	Vss	-	GND
44	RMO	OUT	REMOTE CONTROL SIGNAL OUTPUT FOR OTHER UNIT
45	Vcc	-	SYSTEM POWER
46	S_DATA_TOVDR/FLASH	IN	SERIAL DATA TRANSFER OUTPUT TO VDR SYSCON CPU
47	S_DATA_FRVDR/FLASH	OUT	SERIAL DATA TRANSFER OUTPUT FROM VDR SYSCON CPU
48	S_CLK_SYS	OUT	SERIAL DATA TRANSFER CLOCK FOR V,g,r SCON CPU
49	12C_DATA_AV1	IN/OUT	SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC
50	12C_CLK_AV1	OUT	SERIAL DATA TRANSFER CLOCK FOR MEMORY IC
51	K_BUS_IN1	IN	SERIAL DATA TRANSFER INPUT FROM DVD CPU
52	K_BUS_OUT1	OUT	SERIAL DATA TRANSFER OUTPUT TO DVD CPU
53	K_BUS_CLK1	OUT	SERIAL DATA TRANSFERMER CLOCK FOR DVD CPU
54	K_BUS_REQ1	OUT	SERIAL DATA TRANSFER REQUEST TO DVD CPU
55	E5_RESET[L]	OUT	RESET OUTPUT TO IC1401
56	FLASH	-	FOR REWRITTING PROGRAM

PIN NO.	LABEL	IN/OUT	FUNCTION
57	FLASH	-	FOR REWRITTING PROGRAM
58	FLASH	-	FOR REWRITTING PROGRAM
59	NC	-	NOT USED
60	TU_12C_CLK1	OUT	CLOCK OUTPUT TO TUNER
61	TU_12_DATA1	OUT	DATA OUT PUT TO TUNER
62	FWE	-	FLASH WRITE ENABLE
63	NC	-	NOT USED
64	X2	-	TIMER CLOCK(32kHz)
65	X1	-	TIMER CLOCK(32kHz)
66	RES	-	RESET TERMINAL(RESET ON:L)
67	OSC1	IN	MAIN SYSTEM CLOCK(10MHz)
68	Vss	-	GND
69	OSC2	IN	MAIN SYSTEM CLOCK(10MHz)
70	Vcl	-	NOT USED
71	MODE	-	NOT USED
72	P.MUTE[H]	OUT	PICTURE MUTE CONTROL (MUTE : H)
73	TU_V.MUTE1[H]		TUNER VIDEO MUTE CONTROL (MUTE:H)
74	SEPA_IN	OUT	Y/C SEPARATE INPUT MODE
75	12C_CLK1	OUT	SERIAL DATA TRANSFER CLOCK FOR MEMORY IC
76	12C_DATA1	-	SERIAL DATA TRANSFER OUTPUT FOR MEMORY IC
77	LED9[VDR_TIMER]	OUT	VDR TIMER STAND-BY LED ON/OFF CONTROL
78	P.ON_PULSE	OUT	POWER ON/OFF PULSE OUTPUT
79	VDR_DATA_ON	IN	SERIAL DATA TRANSFER REQUEST TO VDR SYSCON CPU
80	VHS_DATA_ON	OUT	SERIAL DATA TRANSFER REQUEST TO VHS SYSCON CPU
81	LES10[VDR]	OUT	VDR LED ON/OFF CONTROL
82	Vcc	-	SYSTEM POWER
83	A.MUTE[L]	OUT	AUDIO MUTE CONTROL (MUTE ON : L)
84	Vss	-	GND
85	A_INPUT_SEL1	OUT	AUDIO SIGNAL INPUT SELECT-1
86	A_INPUT_SEL2	OUT	AUDIO SIGNAL INPUT SELECT-2
87	DEC_SEL	OUT	DECODER SELECT
88	FRONT[H]	OUT	FRONT INPUT MODE : H
89	AV1_YC_IN[H]	OUT	Y/C SEPARATE INPUT MODE OF AV1 : H
90	VDR[H]	OUT	VDR MODE : H
91	RGB[H]	OUT	RGB MODE : H
92	SYNC_DET	IN	DETECTION OF VDR VIDEO SIGNAL
93	AD_RST[L]	OUT	A/D CONVERTER RESET PULSE OUTPUT
94	SW1_1	OUT	TV RF SYSTEM SELECT-1
95	SW2_1	OUT	TV RF SYSTEM SELECT-2
96	P.SAVE[L]	OUT	POWER SAVE MODE:H
97	NC	-	NOT USED
98	NC	-	NOT USED
99	NC	-	NOT USED
100	NC	-	NOT USED
101	NC	-	NOT USED
102	NC	-	NOT USED
103	NC	-	NOT USED
104	NC	-	NOT USED
105	NC	-	NOT USED
106	NC	-	NOT USED
107	NC	-	NOT USED
108	NC	-	NOT USED
109	Vcc	-	SYSTEM POWER
110	NC	-	NOT USED
111	Vss	-	GND
112	NC	-	NOT USED



Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY VIDEO DISPLAY CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan



PARTS LIST

[DR-MV1BEK, DR-MV1BEU, DR-MV1SEF, DR-MV1SEK, DR-MV1SEU]

* SAFETY PRECAUTION

Parts identified by the \triangle symbol are critical for safety. Replace only with specified part numbers.

* BEWARE OF BOGUS PARTS

Parts that do not meet specifications may cause trouble in regard to safety and performance. We recommend that genuine JVC parts be used.

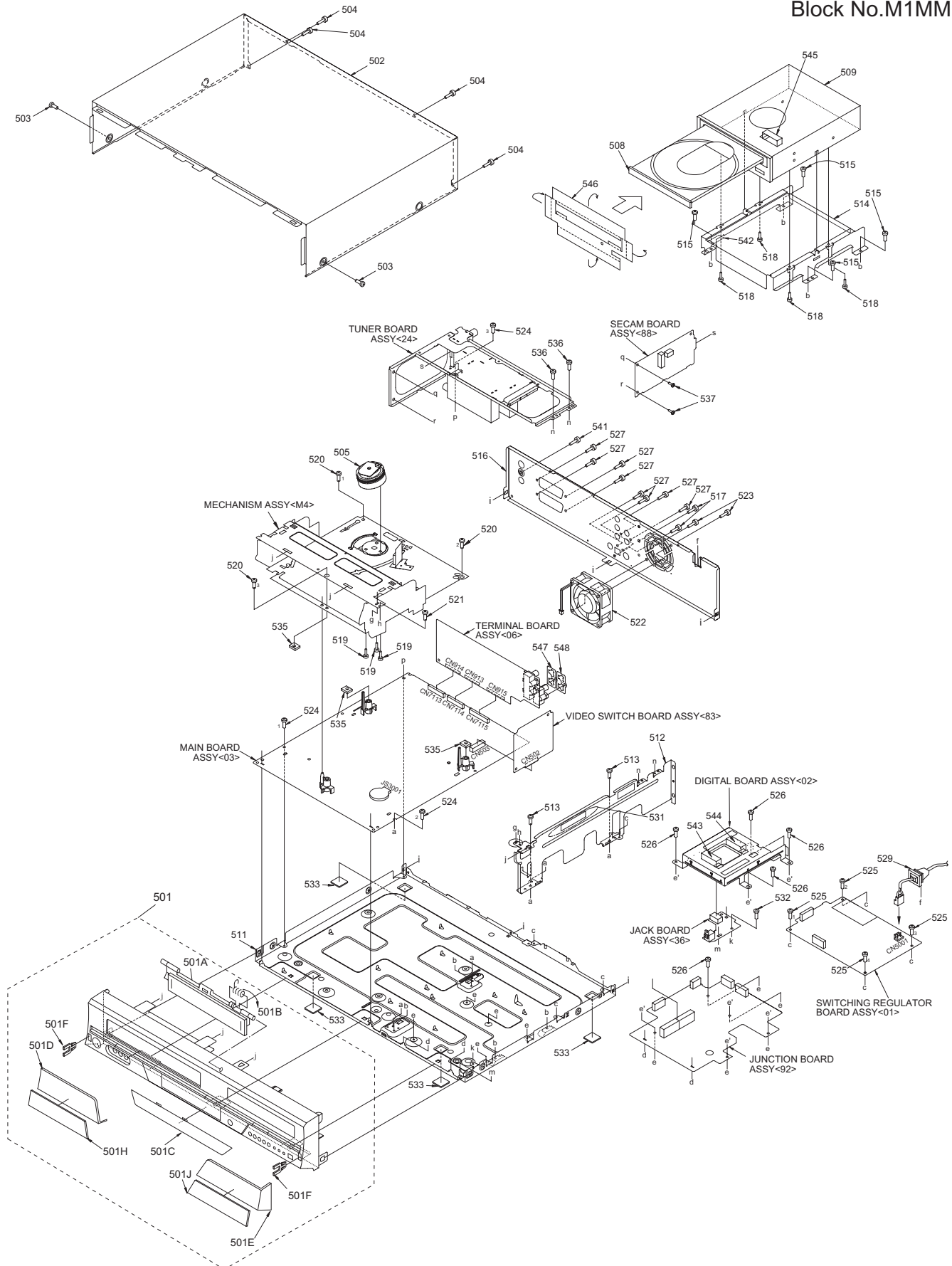
* (x_) in a description column shows the number of the used part.

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Exploded view of general assembly and parts list

Block No.M1MM



MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

General assembly

Block No. [M][1][M][M]

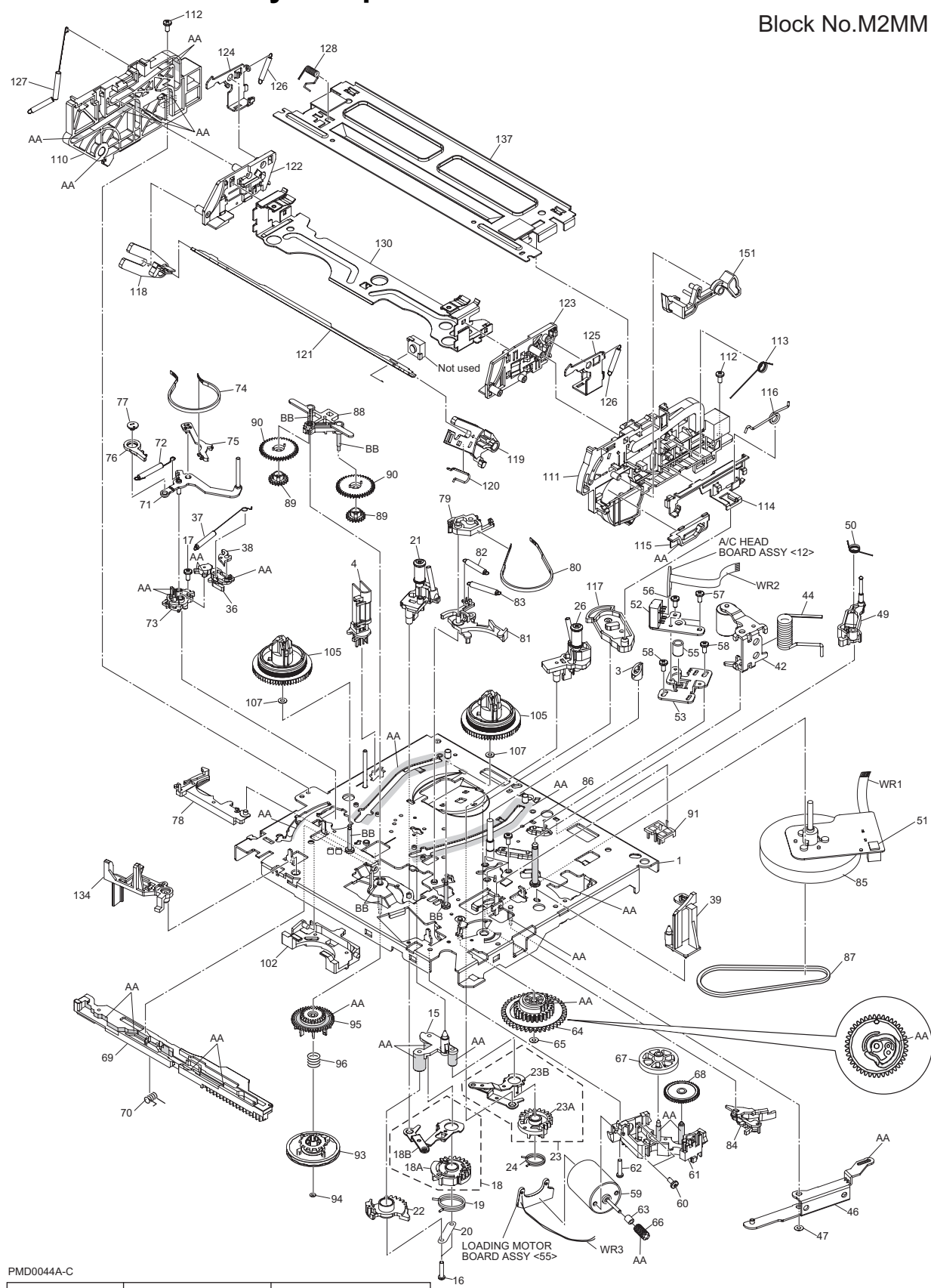
△ Symbol No.	Part No.	Part Name	Description	Local
△ 501	LP10526-014A	FRONT PANEL ASSY		A
△ 501	LP10526-013A	FRONT PANEL ASSY		B
△ 501	LP10526-009B	FRONT PANEL ASSY		C
△ 501	LP10526-008B	FRONT PANEL ASSY		D
△ 501	LP10526-007B	FRONT PANEL ASSY		E
501A	LP21232-006A	CASSETTE DOOR		A,B
501A	LP21232-001A	CASSETTE DOOR		C,D,E
501B	PQ46448	TORSION SPRING		
501C	LP31358-007A	DISPLAY WINDOW		A,B
501C	LP31358-005A	DISPLAY WINDOW		C,D,E
501D	LP31353-003A	DOOR(L)		A,B
501D	LP31353-001A	DOOR(L)		C,D,E
501E	LP31354-003A	DOOR(R)		A,B
501E	LP31354-001A	DOOR(R)		C,D,E
501F	PU60109	CATCHER	(x2)	
501H	LP31356-014A	WINDOW(L)		A
501H	LP31356-013A	WINDOW(L)		B
501H	LP31356-009A	WINDOW(L)		C
501H	LP31356-008A	WINDOW(L)		D
501H	LP31356-007A	WINDOW(L)		E
501J	LP31357-012A	WINDOW(R)		A
501J	LP31357-011A	WINDOW(R)		B
501J	LP31357-007A	WINDOW(R)		D
501J	LP31357-006A	WINDOW(R)		C,E
△ 502	LP10460-008B	TOP COVER		A,B
△ 502	LP10460-004C	TOP COVER		D
△ 502	LP10460-004C	TOP COVER		C,E
503	QYSBSG3006MA	TAP SCREW	M3 x 6mm TOP SIDE(x2)	A,B
503	QYSBSG3006NA	TAP SCREW	M3 x 6mm TOP SIDE(x2)	C,D,E
504	QYSBSG3006MA	TAP SCREW	M3 x 6mm TOP REAR(x4)	A,B
504	QYSBSG3006NA	TAP SCREW	M3 x 6mm TOP REAR(x4)	C,D,E
505	PDV2541A	DRUM FINAL ASSY		C
505	PDV2539A	DRUM FINAL ASSY		A,B,D,E
506	QYTDSF2608ZA	TAP SCREW	M2.6 x 8mm SWITCH/DISPLAY(x5)	
507	QYTDSF2608ZA	TAP SCREW	M2.6 x 8mm OPERATION/JACK(x4)	
508	LP31372-002A	FITTING(DVD) ASSY		
△ 509	QAL0551-002	DRIVE UNIT		A,B
△ 509	QAL0551-001	DRIVE UNIT		C,D,E
△ 511	LP10525-001D	BOTTOM CHASSIS		
512	LP21222-001B	BRACKET(CENTER)		
513	LP31391-001A	SPECIAL SCREW	BRACKET(CENTER)(x2)	
514	LP21223-001A	BRACKET(DRIVE UNIT)		
515	LP31391-001A	SPECIAL SCREW	BRACKET(DVD)(x4)	
△ 516	LP21134-014B	REAR COVER		
517	QYSBSG3006NA	TAP SCREW	M3 x 6mm REAR COVER(x2)	
518	QYT DST3006ZA	TAP SCREW	M3 x 6mm DRIVE(x4)	
519	QYSPSPD3008ZA	SCREW	M3 x 8mm DRUM(x3)	
520	LP31391-002A	SPECIAL SCREW	MECHANISM(x3)	
521	LP31391-001A	SPECIAL SCREW	HOUSING	
522	QAR0310-001	FAN MOTOR		
523	QYTDSF3008MA	TAP SCREW	M3 x 8mm FAN(x2)	
524	LP31391-001A	SPECIAL SCREW	MAIN(x3)	
525	LP31391-001A	SPECIAL SCREW	SWITCHING REGULATOR(x4)	
526	LP31391-001A	SPECIAL SCREW	JUNCTION(x5)	
527	QYTDSF3008MA	TAP SCREW	M3 x 8mm JACK COVER(x8)	
△ 529	QMP51K0-170-K	POWER CORD	1.7m BLACK	A,D
△ 529	QMP4A10-170-K	POWER CORD	1.7m BLACK	B,C,E
531	LP31390-001A	BARCODE LABEL		
532	LP31391-001A	SPECIAL SCREW	JACK	
533	LP31348-001A	FOOT	(x4)	
535	LP41140-001A	INSULATOR	(x3)	
536	LP31391-001A	SPECIAL SCREW	TUNER BRACKET(x2)	
537	LP31391-001A	SPECIAL SCREW	SECAM(x2)	C
538	QGZ0018A1-40	CONNECTOR	(1-40)	
541	QYT DST3005MA	TAP SCREW	M3 x 5mm TUNER	
542	LP30002-0F6A	SPACER	DVD BRACKET	
543	LP41171-001A	SHIELD TIGHT		
544	LP41171-001A	SHIELD TIGHT		
545	LP41171-001A	SHIELD TIGHT		
546	LP31417-001A	SHIELD PLATE		
547	LP31345-001A	EARTH PLATE		
548	LP31345-001A	EARTH PLATE		
WR 1	QUQ112-0918CG	FFC WIRE	JUNCTION CN7107-MAIN CN 7111	
WR 2	QUQ212-0430CG	FFC WIRE	VIDEO SWITCH CN501-JUNCTION CN7104	
WR 3	QUQ112-1308CG	FFC WIRE	OPERATION/JACK CN7201-MAIN CN7112	
WR 4	WJT0151-001A	E-CARD WIRE	SWITCH/DISPLAY CN7001-MAIN CN3102	
WR 5	QUQ212-0410CG	FFC WIRE	SWITCH/DISPLAY CN7002-JUNCTION CN7103	
WR 6	QUQ105-4020AF	FFC WIRE	DRIVE UNIT-DIGITAL CN2201	
WR 7	QJJ032-040804	SIN CR C-C WIRE	SWITCHING REGULATOR CN5303-DRIVE UNIT	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local
WR 8	QUQ210-0406CC	FFC WIRE	JUNCTION CN7105-DIGITAL CN1404	
WR 9	QUQ112-1420CG	FFC WIRE	TUNER CN6001-MAIN CN7116	
WR10	QUQ112-1315CG	FFC WIRE	TUNER CN6002-MAIN CN7117	
WR11	QUQ112-0716CG	FFC WIRE	TUNER CN6003-MAIN CN7118	
WR12	QUQ112-1524CG	FFC WIRE	SECAM CN301-MAIN CN7119	C
WR13	QUQ112-0628CG	FFC WIRE	VIDEO SWITCH CN504-SECAM CN4302	C

VHS mechanism assembly and parts list

Block No.M2MM



PMD0044A-C		
Classification	Part No.	Symbol in drawing
Grease	KYODO-SH-JB	AA
Oil	COSMO-HV56	BB

NOTE: The section marked in AA and BB indicate lubrication and greasing areas.

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

VHS mechanism

Block No. [M][2][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
1	LP21039-003A	MAIN DECK ASSY		
3	LP40097-002E	GUIDE POLE CAP		
4	NAH0004-001	FULL ERASE HEAD		
15	LP30958-001B	LOADING GEAR BASE		
16	QYTPST2620ZA	TAP SCREW	M2.6 x 20mm(x2)	
17	QYTDST2606ZA	TAP SCREW	M2.6 x 6mm	
18	LP40798-002A	LOADING GEAR(SUPPLY) ASSY		
18A	LP21040-001A	LOADING GEAR(SUPPLY)		
18B	LP40799-002A	LOADING ARM(SUPPLY) ASSY		
19	LP40837-001A	TORSION SPRING(SUPPLY)		
20	LP40903-004A	FIXING PLATE		
21	LP40806-001D	POLE BASE ASSY(SUPPLY)		
22	LP30959-001B	LOADING GEAR		
23	LP40802-002A	LOADING GEAR(TAKE UP) ASSY		
23A	LP21041-001D	LOADING GEAR(TAKE UP)		
23B	LP40803-002A	LOADING ARM(TAKE UP) ASSY		
24	LP40838-001A	TORSION SPRING(TAKE UP)		
26	LP40808-001E	POLE BASE ASSY(TAKE UP)		
36	LP21055-001G	TAKE UP LEVER		
37	LP40943-001A	TENSION SPRING		
38	LP40859-001D	T-UP HEAD		
39	LP30961-001C	LID GUIDE		
42	LP40810-003A	PINCH ROLLER ARM ASSY		
44	LP40840-001E	TORSION SPRING		
46	LP30963-002A	PRESS LEVER		
47	PQM30017-24	SLIT WASHER		
49	LP40813-001D	GUIDE ARM ASSY		
50	LP40841-001A	TORSION SPRING		
51	LP30002-090A	SPACER		
52	NAH0003-001	AC HEAD		
53	LP30965-003A	HEAD BASE		
55	LP40842-001D	COMPRESSION SPRING		
56	QYTDST2006MA	TAP SCREW	M2 x 6mm	
57	LP41036-002A	A/C ADJ.SCREW	(x2)	
58	QYTDST2606ZA	TAP SCREW	M2.6 x 6mm(x2)	
59	QAR0289-001	LOADING MOTOR		
60	QYTPSP3003ZA	SCREW	M3 x 3mm(x2)	
61	LP21056-002J	MOTOR BRACKET		
62	QYTPST2620ZA	TAP SCREW	M2.6 x 20mm	
63	LP40814-001B	WORM BEARING		
64	LP21044-001E	CONTROL CAM		
65	PQM30017-24	SLIT WASHER		
66	LP40815-001A	WORM GEAR		
67	LP40816-001B	HELICAL GEAR		
68	LP40817-001A	CONNECT GEAR		
69	LP10400-001N	CONTROL PLATE		
70	LP40843-001A	TORSION SPRING		
71	LP40818-002A	TENSION ARM ASSY		
72	LP40844-001F	TENSION SPRING		
73	LP21045-001E	TENSION ARM BASE		
74	LP40821-001A	TENSION BAND ASSY		
75	LP30967-001B	BAND HOLDER-1		
76	LP30968-001C	BAND HOLDER-2		
77	LP40822-002B	ADJUST PIN		
78	LP31000-005E	TENSION ARM LEVER		
79	LP21046-001C	MAIN BRAKE(TAKE UP)		
80	LP40824-001A	BAND BRAKE ASSY		
81	LP30969-002B	BRAKE LEVER		
82	LP30003-033C	TENSION SPRING		
83	LP30003-035C	TENSION SPRING		
84	LP40825-001B	CAPSTAN BRAKE ASSY		
△ 85	QAR0267-002	CAPSTAN MOTOR		
86	QYTPSG2606ZA	TAP SCREW	M2.6 x 6mm(x3)	
87	LP30005-010A	BELT	CAPSTAN MOTOR	
88	LP30970-001A	IDLER ARM		
89	LP40828-004A	IDLER GEAR 1	(x2)	
90	LP40829-002A	IDLER GEAR 2	(x2)	
91	LP31014-002A	WIRE HOLDER		
93	LP40934-001B	CLUTCH UNIT		
94	PQM30017-47	SLIT WASHER		
95	LP30973-001A	DIRECT GEAR		
96	LP40939-001A	COMPRESSION SPRING		
102	LP30974-001C	CHANGE LEVER		
105	LP21049-001A	REEL DISK	(x2)	
107	LP30017-004A	SPACER	REEL DISK(x2)	
110	LP10401-001L	SIDE FRAME(L)		
111	LP10402-001M	SIDE FRAME(R)		
112	QYTDST2606ZA	TAP SCREW	M2.6 x 6mm(x2)	
113	LP40917-001D	TORSION SPRING		

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

Symbol No.	Part No.	Part Name	Description	Local
114	LP30976-002B	SIDE PLATE		
115	LP30977-002E	LIMIT PLATE		
116	LP40846-001C	LIMIT SPRING		
117	LP31100-002A	DRIVE LEVER		
118	LP30978-001B	DRIVE ARM(L)		
119	LP30979-001S	DRIVE ARM(R)		
120	LP40847-001B	TORSION SPRING		
121	LP30980-002A	CONNECT PLATE		
122	LP10403-001C	SIDE HOLDER(L)		
123	LP10404-001E	SIDE HOLDER(R)		
124	LP30983-002A	LOCK LEVER(L)		
125	LP30984-002A	LOCK LEVER(R)		
126	LP40924-001D	TENSION SPRING	(x2)	
127	LP40972-001A	EARTH SPRING(1)		
128	LP40857-001B	EARTH SPRING(2)		
130	LP30981-003A	CASSETTE HOLDER ASSY		
134	LP21051-002C	REC SAFETY LEVER		
137	LP21052-002A	TOP FRAME		
151	LP30985-002M	DOOR OPENER		
WR1	WJT0117-001A	E-CARD WIRE	DRUM	
WR2	WJT0067-001B	E-CARD WIRE	A/C HEAD CN2001	
WR3	WJS0022-001A	E-FL/RB WIRE	LOADING MOTOR	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

Electrical parts list

Switching regulator board

Block No. [0][1]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10248-01C1	SWITCHING REGULATOR BOARD ASSY		
IC5101	STR-G6653-F9	IC		
IC5301	UTCTL431-T	IC		
IC5301	or MM1431AT-T	IC		
IC5301	or L5431-T	IC		
IC5301	or TL431/A-T	IC		
IC5302	PQ5EV3	IC		
Q5304	UMD12N-W	DIGI TRANSISTOR		
Q5304	or XP4313-W	DIGI TRANSISTOR		
Q5305	2SD2144S/UV/-T	TRANSISTOR		
Q5305	or 2SC3576-JVC-T	TRANSISTOR		
Q5306	2SC5739/QP/	TRANSISTOR		
Q5307	2SA1585S/QR/-T	TRANSISTOR		
Q5308	PDTC114EU-X	DIGI TRANSISTOR		
Q5308	or DTC114EUA-X	DIGI TRANSISTOR		
Q5308	or UN5211-X	DIGI TRANSISTOR		
Q5308	or RN1302-X	DIGI TRANSISTOR		
Q5313	2SA1585S/QR/-T	TRANSISTOR		
Q5314	2SA1585S/QR/-T	TRANSISTOR		
Q5315	PDTC114EU-X	DIGI TRANSISTOR		
Q5315	or DTC114EUA-X	DIGI TRANSISTOR		
Q5315	or UN5211-X	DIGI TRANSISTOR		
Q5315	or RN1302-X	DIGI TRANSISTOR		
D5001	GBJ4J	BRIDGE DIODE		
D5001	or D3SBA60	DIODE		
D5101	SARS01-T2	SI DIODE		
D5103	1F4G-T2	FR DIODE		
D5103	or 10ERB20-T2	FR DIODE		
D5103	or ERA18-02-T2	FR DIODE		
D5103	or AU01Z-T2	FR DIODE		
D5103	or 1SR153-400-T2	FR DIODE		
D5104	1SS133-T2	DIODE		
D5104	or 1SS270A-T2	SI DIODE		
D5105	10ERB20-T2	FR DIODE		
D5105	or ERA18-02-T2	FR DIODE		
D5105	or AU01Z-T2	FR DIODE		
D5105	or 1SR153-400-T2	FR DIODE		
D5105	or 1F4G-T2	FR DIODE		
D5106	10ERB20-T2	FR DIODE		
D5106	or ERA18-02-T2	FR DIODE		
D5106	or AU01Z-T2	FR DIODE		
D5106	or 1SR153-400-T2	FR DIODE		
D5106	or 1F4G-T2	FR DIODE		
D5202	1SR156-400-X	SI DIODE		
D5203	RL2Z-LFB2	FRD		
D5204	D1FS4A-X	SB DIODE		
D5205	RK34-LFB2	SB DIODE		
D5206	RK34-LFB2	SB DIODE		
D5207	D1FS4A-X	SB DIODE		
D5208	RK34-LFB2	SB DIODE		
D5209	RK34-LFB2	SB DIODE		
D5210	1F4G-T2	FR DIODE		
D5210	or PG104RS-T2	FR DIODE		
D5210	or 10ERB20-T2	FR DIODE		
D5210	or 1SR153-400-T2	FR DIODE		
D5210	or ERA18-02-T2	FR DIODE		
D5211	ERA18-02-T2	FR DIODE		
D5211	or 1SR153-400-T2	FR DIODE		
D5211	or 10ERB20-T2	FR DIODE		
D5211	or 1F4G-T2	FR DIODE		
D5212	D1FS4A-X	SB DIODE		
D5213	1F4G-T2	FR DIODE		
D5213	or 10ERB20-T2	FR DIODE		
D5213	or ERA18-02-T2	FR DIODE		
D5213	or AU01Z-T2	FR DIODE		
D5213	or 1SR153-400-T2	FR DIODE		
D5301	MTZJ15A-T2	Z DIODE		
D5301	or RD15ES/B1/-T2	Z DIODE		
D5303	MTZJ11C-T2	Z DIODE		

△ Symbol No.	Part No.	Part Name	Description	Local
D5303	or RD11ES/B3/-T2	Z DIODE		
D5304	MTZJ5.6C-T2	Z DIODE		
D5304	or RD5.6ES/B3/-T2	Z DIODE		
D5306	RK34-LFB2	SB DIODE		
D5307	RK34-LFB2	SB DIODE		
D5308	RK34-LFB2	SB DIODE		
D5309	1S4-T2	SB DIODE		
D5309	or SBO40-T2	SB DIODE		
D5309	or AW04-T2	SB DIODE		
D5312	1SS133-T2	DIODE		
D5312	or 1SS270A-T2	SI DIODE		
D5313	1A3G-T2	SI DIODE		
D5313	or ERA15-02-T2	SI DIODE		
D5313	or 10EDB20-T2	SI DIODE		
△ PC5101	PC123Y22FZ	PHOTO COUPLER		
△ C5001	QFZ9073-683	MM CAPACITOR	0.068uF AC250V M	
△ C5002	QFZ9051-223	MM CAPACITOR	0.022uF 250V M	
C5003	QE20374-107	E CAPACITOR	100uF 400V M	
△ C5004	QCZ9079-222	C CAPACITOR	2200pF AC250V M	
C5101	QCZ0339-101Z	C CAPACITOR	100pF 1kV K	
C5102	QCZ0349-472Z	C CAPACITOR	4700pF 1kV K	
C5103	QEMU1VM-276Z	E CAPACITOR	27uF 35V M	
C5104	QCZ0136-102Z	C CAPACITOR	1000pF 1kV K	
C5105	QFLC1HJ-471Z	M CAPACITOR	470pF 50V J	
C5106	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C5107	NCB21HK-221X	C CAPACITOR	220pF 50V K	
C5202	QETN2AM-475Z	E CAPACITOR	4.7uF 100V M	
C5203	QEMT1CM-687	E CAPACITOR	680uF 16V M	
C5204	QEMT1CM-687	E CAPACITOR	680uF 16V M	
C5205	QEMT1AM-128	E CAPACITOR	1200uF 10V M	
C5206	QEC501AM-128	E CAPACITOR	1200uF 10V M	
C5207	QEC50JM-158	E CAPACITOR	1500uF 6.3V M	
C5208	QEMT1AM-108	E CAPACITOR	1000uF 10V M	
C5209	QEMU1HM-186Z	E CAPACITOR	18uF 50V M	
C5210	QEMX0JM-227Z	E CAPACITOR	220uF 6.3V M	
C5301	QFVF1HJ-154Z	MF CAPACITOR	0.15uF 50V J	
C5302	QFLC1HJ-333Z	M CAPACITOR	0.033uF 50V J	
C5303	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5304	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5305	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5306	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5307	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5308	QETN1CM-107Z	E CAPACITOR	100uF 16V M	
C5310	QETN1HM-225Z	E CAPACITOR	2.2uF 50V M	
C5311	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5312	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5313	NCB21HK-471X	C CAPACITOR	470pF 50V K	
C5314	QETN1AM-107Z	E CAPACITOR	100uF 10V M	
C5315	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
R5101	QRG02GJ-683	OMF RESISTOR	68kΩ 2W J	
R5102	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R5103	QRE141J-684Y	C RESISTOR	680kΩ 1/4W J	
R5104	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R5105	QRE141J-680Y	C RESISTOR	68Ω 1/4W J	
R5106	QRE141J-392Y	C RESISTOR	3.9kΩ 1/4W J	
R5107	NRSA02J-681X	MG RESISTOR	680Ω 1/10W J	
R5108	QRT01DJ-R33X	MF RESISTOR	0.33Ω 1W J	
△ R5109	QRZ9005-470X	FUSI RESISTOR	47Ω 1/4W G	
R5301	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J	
R5302	NRSA02J-472X	MG RESISTOR	4.7kΩ 1/10W J	
R5303	NRVA02D-152X	CMF RESISTOR	1.5kΩ 1/10W D	
R5304	NRVA02D-682X	CMF RESISTOR	6.8kΩ 1/10W D	
R5305	NRVA02D-243X	CMF RESISTOR	24kΩ 1/10W D	
R5306	NRVA02D-392X	CMF RESISTOR	3.9kΩ 1/10W D	
R5308	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
R5309	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R5312	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R5313	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R5314	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R5315	QRE121J-820Y	C RESISTOR	82Ω 1/2W J	
R5316	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R5317	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R5318	NRVA02D-302X	CMF RESISTOR	3kΩ 1/10W D	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local
R5319	NRVA02D-472X	CMF RESISTOR	4.7kΩ 1/10W D	
R5325	QRE141J-8R2Y	C RESISTOR	8.2Ω 1/4W J	
△ R5326	QRZ9005-470X	FUSI RESISTOR	47Ω 1/4W G	
R5327	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R5328	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
R5329	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R5330	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
L5201	PELN1184	CHOKE COIL		
L5202	PELN1184	CHOKE COIL		
L5204	PELN1184	CHOKE COIL		
L5205	PELN1184	CHOKE COIL		
L5206	PELN1184	CHOKE COIL		
L5207	PELN1184	CHOKE COIL		
△ T5001	QQS0263-001	SW TRANSF		
B5301	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B5305	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
△ CN5001	QGA7901C3-02	CONNECTOR	W-B (1-2)	
CN5301	QGB1231L1-15	CONNECTOR	B-B (1-15)	
CN5302	QGA2001C1-02	CONNECTOR	W-B (1-2)	
CN5303	QGA2501C1-04	CONNECTOR	W-B (1-4)	
CN5304	QGB1231L1-15	CONNECTOR	B-B (1-15)	
△ CP5301	QMFZ049-1R5Z-E	FUSE	1.5A 125V	
△ F5001	QMF51E2-2R0-J1	FUSE	2A AC250V	
FC5001	QNG0020-001Z	FUSE CLIP		
FC5002	QNG0020-001Z	FUSE CLIP		
HS1	PEME0889-01-01	HEAT SINK		
△ LF5002	QQR1031-001	LINE FILTER		
OT1	QYTDST3010Z	TAP SCREW	M3 x 10mm IC5101	
W5501	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	

Digital board

Block No. [0][2]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10236-06B	DIGITAL BOARD ASSY		
IC1001	JCP8059	IC		
IC1002	HY57V161610ET-8	IC		
IC1002	or K4S161622H-TC80	IC		
IC1002	or MT48LC1M16A1TG8	IC		
IC1002	or HY57V161610ETP7	IC		
IC1002	or MT48LC1M16TG-7S	IC		
IC1201	LPN0889-001C	IC (FLASH)	(SERVICE)	
IC1202	SN74LVC373APW-X	IC (DIGITAL)		
IC1203	SN74LVC373APW-X	IC (DIGITAL)		
IC1401	DMN8652-B0	IC (DIGITAL)		
IC1404	SN74HCT08APW-X	IC		
IC1405	SN74LV08APW-X	IC		
IC1601	HY5DU561622CT-J	IC		
IC1602	HY5DU561622CT-J	IC		
IC1701	PQ015YZ01Z-X	IC		
IC1801	TSB41AB2PAP	IC		
Q1002	2SA1037AK/QR/-X	TRANSISTOR		
Q1002	or 2SA1530A/QR/-X	TRANSISTOR		
Q1002	or 2SB709A/QR/-X	TRANSISTOR		
Q1003	2SA1037AK/QR/-X	TRANSISTOR		
Q1003	or 2SA1530A/QR/-X	TRANSISTOR		
Q1003	or 2SB709A/QR/-X	TRANSISTOR		
Q1004	2SA1037AK/QR/-X	TRANSISTOR		
Q1004	or 2SA1530A/QR/-X	TRANSISTOR		
Q1004	or 2SB709A/QR/-X	TRANSISTOR		
Q1005	2SA1037AK/QR/-X	TRANSISTOR		
Q1005	or 2SA1530A/QR/-X	TRANSISTOR		
Q1005	or 2SB709A/QR/-X	TRANSISTOR		
Q1006	2SA1037AK/QR/-X	TRANSISTOR		
Q1006	or 2SA1530A/QR/-X	TRANSISTOR		
Q1006	or 2SB709A/QR/-X	TRANSISTOR		
Q1007	2SA1037AK/QR/-X	TRANSISTOR		
Q1007	or 2SA1530A/QR/-X	TRANSISTOR		
Q1007	or 2SB709A/QR/-X	TRANSISTOR		

△ Symbol No.	Part No.	Part Name	Description	Local
Q1008	UMZ1N-W	PAIR TRANSISTOR		
Q1008	or BC847PN-X	PAIR TRANSISTOR		
Q1008	or BC846PN-X	PAIR TRANSISTOR		
Q1009	2SC2412K/QRS/-X	TRANSISTOR		
Q1009	or 2SC3928A/QRS/-X	TRANSISTOR		
Q1009	or 2SD601A/QRS/-X	TRANSISTOR		
Q1010	2SC2412K/QRS/-X	TRANSISTOR		
Q1010	or 2SC3928A/QRS/-X	TRANSISTOR		
Q1010	or 2SD601A/QRS/-X	TRANSISTOR		
Q1011	2SC2412K/QRS/-X	TRANSISTOR		
Q1011	or 2SC3928A/QRS/-X	TRANSISTOR		
Q1011	or 2SD601A/QRS/-X	TRANSISTOR		
D1001	1SS355-X	SI DIODE		
D1001	or MA111-X	SI DIODE		
D1002	1SS355-X	SI DIODE		
D1002	or MA111-X	SI DIODE		
D1401	1SS355-X	SI DIODE		
D1401	or MA111-X	SI DIODE		
D1402	1SS355-X	SI DIODE		
D1402	or MA111-X	SI DIODE		
D1403	1SS355-X	SI DIODE		
D1403	or MA111-X	SI DIODE		
C1001	NBE20JM-226X	TA E CAPACITOR	22uF 6.3V M	
C1002	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1003	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1004	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1005	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1007	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1008	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1009	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1012	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1014	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1015	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1017	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1018	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1019	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1020	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1026	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1030	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1032	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1033	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1034	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1035	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1036	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1038	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1039	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1041	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1042	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1043	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1044	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1045	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1046	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1047	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1051	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1052	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1053	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1054	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1055	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1056	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1057	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1059	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1060	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1061	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1062	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C1065	NCB20JM-475X	C CAPACITOR	4.7uF 6.3V M	
C1077	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1089	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1090	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1091	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1092	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1093	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1094	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1095	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1096	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1097	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1098	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C1203	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1625	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1204	NEH90JM-476X	E CAPACITOR	47uF 6.3V M		C1638	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1206	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1640	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1207	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1642	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1401	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1644	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1402	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1646	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1403	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1648	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1404	NEH90JM-107X	E CAPACITOR	100uF 6.3V M		C1650	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1405	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1652	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1406	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1654	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1407	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1656	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1408	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1658	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1409	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1701	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1410	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1702	NEH90JM-107X	E CAPACITOR	100uF 6.3V M	
C1411	NEH90JM-107X	E CAPACITOR	100uF 6.3V M		C1703	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1412	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1704	NEH90JM-107X	E CAPACITOR	100uF 6.3V M	
C1413	NEH90JM-107X	E CAPACITOR	100uF 6.3V M		C1706	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1414	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1707	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1416	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1708	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C1417	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1710	NBE40JM-476X	TA E CAPACITOR	47uF 6.3V M	
C1418	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1801	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C1420	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M		C1802	NDC31HJ-271X	C CAPACITOR	270pF 50V J	
C1421	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1803	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1422	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1804	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1423	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1805	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1424	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1806	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M	
C1425	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1807	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1426	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1808	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C1427	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M		C1809	NDC31HJ-120X	C CAPACITOR	12pF 50V J	
C1428	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1811	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1429	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C1812	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1430	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2201	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1431	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2202	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C1432	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1001	NRSA63D-221X	MG RESISTOR	220Ω 1/16W D	
C1433	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1435	NBE20JM-106X	TA E CAPACITOR	10uF 6.3V M		R1003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1436	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1437	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1005	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C1438	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1439	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1007	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C1440	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1009	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C1441	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1012	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1442	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1013	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
C1443	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1014	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
C1444	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1015	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
C1445	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1017	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1446	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1018	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1447	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1019	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1448	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		R1021	NRSA63D-332X	MG RESISTOR	3.3kΩ 1/16W D	
C1449	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1022	NRSA63D-152X	MG RESISTOR	1.5kΩ 1/16W D	
C1450	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1024	NRSA63D-272X	MG RESISTOR	2.7kΩ 1/16W D	
C1452	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1027	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
C1453	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1028	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
C1455	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1029	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1457	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1030	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C1458	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1031	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C1601	NBAD0GM-227X	OS E CAPACITOR	220uF 2.5V M		R1032	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C1602	NBAD0GM-227X	OS E CAPACITOR	220uF 2.5V M		R1033	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C1605	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1035	NQR0129-002X	FERRITE BEADS		
C1606	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1036	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1607	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1037	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
C1608	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1038	NQR0129-002X	FERRITE BEADS		
C1609	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1039	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1610	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1040	NRSA63D-101X	MG RESISTOR	100Ω 1/16W D	
C1611	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1041	NQR0129-002X	FERRITE BEADS		
C1612	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1042	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1613	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1043	NRSA63D-151X	MG RESISTOR	150Ω 1/16W D	
C1614	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1044	NQR0129-002X	FERRITE BEADS		
C1615	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1045	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1616	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1046	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
C1617	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1047	NRSA63D-201X	MG RESISTOR	200Ω 1/16W D	
C1618	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1048	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1619	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1049	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1620	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1050	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
C1621	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1051	NRSA63D-271X	MG RESISTOR	270Ω 1/16W D	
C1622	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1052	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C1623	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R1053	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C1624	NCB31CK-104X	C CAPACITOR	0.1uF 16V K						

Δ Symbol No.	Part No.	Part Name	Description	Local
R1469	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1470	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1471	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1472	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1473	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1474	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1475	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1476	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1477	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1478	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1479	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1480	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1481	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1482	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1491	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1493	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1496	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1497	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1498	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1601	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1602	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1603	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1604	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1605	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1606	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1607	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1608	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1613	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1614	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1615	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1616	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1617	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1618	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1619	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1620	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1621	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1622	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1623	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1624	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1625	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1626	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1627	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1628	NRSA63J-270X	MG RESISTOR	27Ω 1/16W J	
R1642	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R1644	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R1649	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1650	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1651	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1652	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R1653	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1654	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1655	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1656	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1657	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1658	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1659	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1660	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J	
R1701	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R1702	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R1703	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1704	NRSA63D-222X	MG RESISTOR	2.2kΩ 1/16W D	
R1801	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1802	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1803	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1804	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1805	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1807	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1809	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R1810	NRSA63J-394X	MG RESISTOR	390kΩ 1/16W J	
R1812	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R1813	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1814	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1815	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1816	NRSA63J-560X	MG RESISTOR	56Ω 1/16W J	
R1817	NRSA63J-512X	MG RESISTOR	5.1kΩ 1/16W J	
R1818	NRSA63D-562X	MG RESISTOR	5.6kΩ 1/16W D	
R1819	NRSA63D-751X	MG RESISTOR	750Ω 1/16W D	
R1820	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R1821	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		RA2207	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4	
R1822	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		RA2208	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
R2201	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		RA2209	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
R2202	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		RA2210	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
R2203	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		RA2211	NRZ0040-330X	NET RESISTOR	33Ω 1/16W J x4	
R2204	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J						
R2205	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J		L1004	NQL144K-100X	P COIL	0.30Ω 10uH K	
R2206	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J		L1801	NQL144K-100X	P COIL	0.30Ω 10uH K	
R2207	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J		T1801	NQR0444-001X	CHOKO COIL		
R2208	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J						
R2209	NRSA63J-220X	MG RESISTOR	22Ω 1/16W J		B1001	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R2210	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J		B1007	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R2211	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J		B1008	NQR0339-001X	FERRITE BEADS		
R2212	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J		B1204	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2213	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J		B1208	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2214	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J		B1802	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R2215	NRSA63J-330X	MG RESISTOR	33Ω 1/16W J		CN1001	QGB2027L6-28X	CONNECTOR	B-B (1-28)	
RA1001	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4		CN1002	QGB2027L6-28X	CONNECTOR	B-B (1-28)	
RA1002	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4		CN1403	QGF1016C2-04W	CONNECTOR	FFC/FPC (1-4)	
RA1003	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J		CN1404	QGF1016F2-04W	CONNECTOR	FFC/FPC (1-4)	
RA1004	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J		CN1801	QGB2027L1-10X	CONNECTOR	B-B (1-10)	
RA1005	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J		CN2201	QGF0539C1-40W	CONNECTOR	FFC/FPC (1-40)	
RA1006	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J		K1001	NQR0339-001X	FERRITE BEADS		
RA1201	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J		K1002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
RA1202	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J		K1003	NQR0129-002X	FERRITE BEADS		
RA1203	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J		K1004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
RA1204	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J		K1005	NQR0129-002X	FERRITE BEADS		
RA1401	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
RA1402	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1007	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
RA1403	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
RA1404	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
RA1405	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J		K1010	NQR0129-002X	FERRITE BEADS		
RA1406	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J		K1011	NQR0129-002X	FERRITE BEADS		
RA1407	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J		K1012	NQR0129-002X	FERRITE BEADS		
RA1408	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J		K1013	NQR0129-002X	FERRITE BEADS		
RA1409	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J		K1014	NQR0129-002X	FERRITE BEADS		
RA1410	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J		K1015	NQR0129-002X	FERRITE BEADS		
RA1411	NRZ0034-101W	NET RESISTOR	100Ω 1/32W J		K1016	NQR0129-002X	FERRITE BEADS		
RA1601	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1017	NQR0129-002X	FERRITE BEADS		
RA1602	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1018	NQR0129-002X	FERRITE BEADS		
RA1603	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1019	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
RA1604	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1020	NQR0129-002X	FERRITE BEADS		
RA1605	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1201	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
RA1606	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1401	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
RA1607	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1402	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
RA1608	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K1403	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
RA1609	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K1404	NQR0339-001X	FERRITE BEADS		
RA1610	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K1406	NQR0339-001X	FERRITE BEADS		
RA1611	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K1407	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
RA1612	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K1408	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
RA1613	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K1701	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
RA1614	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K1702	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
RA1615	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K1801	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
RA1616	NRZ0040-220X	NET RESISTOR	22Ω 1/16W J x4		K2201	NQR0129-002X	FERRITE BEADS		
RA1617	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2202	NQR0129-002X	FERRITE BEADS		
RA1618	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2203	NQR0129-002X	FERRITE BEADS		
RA1619	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2204	NQR0129-002X	FERRITE BEADS		
RA1620	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2205	NQR0129-002X	FERRITE BEADS		
RA1621	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2206	NQR0129-002X	FERRITE BEADS		
RA1622	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2207	NQR0129-002X	FERRITE BEADS		
RA1623	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2208	NQR0129-002X	FERRITE BEADS		
RA1624	NRZ0040-101X	NET RESISTOR	100Ω 1/16W J x4		K2209	NQR0129-002X	FERRITE BEADS		
RA1625	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4		K2210	NQR0129-002X	FERRITE BEADS		
RA1626	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4		K2211	NQR0129-002X	FERRITE BEADS		
RA1627	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4		K2212	NQR0129-002X	FERRITE BEADS		
RA1628	NRZ0040-100X	NET RESISTOR	10Ω 1/16W J x4		K2213	NQR0129-002X	FERRITE BEADS		
RA1629	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4		K2214	NQR0129-002X	FERRITE BEADS		
RA1630	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4		K2215	NQR0129-002X	FERRITE BEADS		
RA1631	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4		K2216	NQR0129-002X	FERRITE BEADS		
RA1632	NRZ0040-470X	NET RESISTOR	47Ω 1/16W J x4		K2217	NQR0129-002X	FERRITE BEADS		
RA1801	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J		K2218	NQR0129-002X	FERRITE BEADS		
RA1802	NRZ0034-103W	NET RESISTOR	10kΩ 1/32W J		K2219	NQR0129-002X	FERRITE BEADS		
RA2201	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4		K2220	NQR0129-002X	FERRITE BEADS		
RA2202	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4		K2221	NQR0129-002X	FERRITE BEADS		
RA2203	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4		LC1401	NQR0415-002X	EMI FILTER	1uF 16V Z	
RA2204	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4		LC1402	NQR0415-002X	EMI FILTER	1uF 16V Z	
RA2205	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4		LC1403	NQR0415-002X	EMI FILTER	1uF 16V Z	
RA2206	NRZ0040-0R0X	NET RESISTOR	0Ω 1/16W J x4		OT1	LC41656-001A	COOLING SHEET		

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local
SD1	LP21293-001A	SHIELD FRAME(DIGITAL)		
X1401	NAX0580-001X	CXO	27.0000MHz	
X1801	NAX0666-001X	CRYSTAL	24.576000MHz	

Main board

Block No. [0][3]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10245-03D	MAIN BOARD ASSY		C
PW1	LPA10245-02D	MAIN BOARD ASSY		A,D
PW1	LPA10245-01D	MAIN BOARD ASSY		B,E
IC1	JCP8060-MSA	IC		
IC201	LC74776-9791	IC		
△ IC2201	AN3651FBP	IC		
IC2601	RC4558D-X	IC		
IC2602	BU4052BCF-X	IC		
IC2602	or CD4052BM-X	IC		
IC2603	RC4558D-X	IC		
IC2604	BU4052BCF-X	IC		
IC2604	or CD4052BM-X	IC		
IC2605	RC4558D-X	IC		
IC2606	LA7151	IC		
IC2607	LA7151	IC		
IC3001	HD6432194SAD75F	IC(MCU)	MASK	C
IC3001	HD6432194SAD63F	IC(MCU)	MASK	A,B,D,E
IC3002	IC-PST3427U-X	IC		
IC3004	LPN0883-003A-33	IC(EEPROM)	*(REFER TO BELOW) C	
IC3004	LPN0883-002B-32	IC(EEPROM)	*(REFER TO BELOW) A,D	
IC3004	LPN0883-001E-31	IC(EEPROM)	*(REFER TO BELOW) B,E	
IC3301	HD6432194SAD84F	IC(MCU)	MASK	C
IC3301	HD6432194SAD64F	IC(MCU)	MASK	A,B,D,E
IC3302	IC-PST3427U-X	IC		
IC3303	LPN0887-001A-10	IC(EEPROM)	*(REFER TO BELOW) C	
IC3303	LPN0882-002D-02	IC(EEPROM)	*(REFER TO BELOW) A,D	
IC3303	LPN0882-001D-11	IC(EEPROM)	*(REFER TO BELOW) B,E	
IC7101	CD74HC4053PW-X	IC		
IC7501	74VHCT08ASJ-X	IC		
Q4	2SA1037AK/QR/-X	TRANSISTOR		C
Q4	2SB709A/QR/-X	TRANSISTOR		C
Q4	2SA1530A/QR/-X	TRANSISTOR		C
Q7	2SC2412K/QRS/-X	TRANSISTOR		
Q7	or 2SD601A/QRS/-X	TRANSISTOR		
Q7	or 2SC3928A/QRS/-X	TRANSISTOR		
Q8	2SC2412K/QRS/-X	TRANSISTOR		
Q8	or 2SD601A/QRS/-X	TRANSISTOR		
Q8	or 2SC3928A/QRS/-X	TRANSISTOR		
Q9	2SC2412K/QRS/-X	TRANSISTOR		
Q9	or 2SD601A/QRS/-X	TRANSISTOR		
Q9	or 2SC3928A/QRS/-X	TRANSISTOR		
Q10	2SC2412K/QRS/-X	TRANSISTOR		
Q10	or 2SD601A/QRS/-X	TRANSISTOR		
Q10	or 2SC3928A/QRS/-X	TRANSISTOR		
Q16	2SA1037AK/QR/-X	TRANSISTOR		
Q16	or 2SB709A/QR/-X	TRANSISTOR		
Q16	or 2SA1530A/QR/-X	TRANSISTOR		
Q207	2SA1037AK/QR/-X	TRANSISTOR		
Q207	or 2SB709A/QR/-X	TRANSISTOR		
Q207	or 2SA1530A/QR/-X	TRANSISTOR		
Q208	2SC2412K/QRS/-X	TRANSISTOR		
Q208	or 2SD601A/QRS/-X	TRANSISTOR		
Q208	or 2SC3928A/QRS/-X	TRANSISTOR		
Q2001	2SC2412K/QRS/-X	TRANSISTOR		
Q2001	or 2SD601A/QRS/-X	TRANSISTOR		
Q2001	or 2SC3928A/QRS/-X	TRANSISTOR		
Q2002	2SC2412K/QRS/-X	TRANSISTOR		
Q2002	or 2SD601A/QRS/-X	TRANSISTOR		
Q2002	or 2SC3928A/QRS/-X	TRANSISTOR		
Q2003	DTA144WKA-X	TRANSISTOR		
Q2003	or UN221E-X	DIGI TRANSISTOR		
Q2003	or RT1P44HC-X	DIGI TRANSISTOR		
Q2051	2SC2412K/QRS/-X	TRANSISTOR		

△ Symbol No.	Part No.	Part Name	Description	Local
Q2051	or 2SD601A/QRS/-X	TRANSISTOR		
Q2051	or 2SC3928A/QRS/-X	TRANSISTOR		
Q2052	2SA1037AK/QR/-X	TRANSISTOR		
Q2052	or 2SB709A/QR/-X	TRANSISTOR		
Q2052	or 2SA1530A/QR/-X	TRANSISTOR		
Q2053	DTC144WKA-X	DIGI TRANSISTOR		
Q2053	or UN221E-X	TRANSISTOR		
Q2053	or RT1N44HC-X	DIGI TRANSISTOR		
Q2054	2SA1037AK/QR/-X	TRANSISTOR		
Q2054	or 2SB709A/QR/-X	TRANSISTOR		
Q2054	or 2SA1530A/QR/-X	TRANSISTOR		
Q2055	DTC144WKA-X	DIGI TRANSISTOR		
Q2055	or UN221E-X	TRANSISTOR		
Q2055	or RT1N44HC-X	DIGI TRANSISTOR		
Q2201	DTA144WKA-X	TRANSISTOR		
Q2201	or UN221E-X	DIGI TRANSISTOR		
Q2201	or RT1P44HC-X	DIGI TRANSISTOR		
Q2202	DTC144WKA-X	DIGI TRANSISTOR		
Q2202	or UN221E-X	TRANSISTOR		
Q2202	or RT1N44HC-X	DIGI TRANSISTOR		
Q2203	2SC2412K/QRS/-X	TRANSISTOR		
Q2203	or 2SD601A/QRS/-X	TRANSISTOR		
Q2203	or 2SC3928A/QRS/-X	TRANSISTOR		
Q2204	2SC2412K/QRS/-X	TRANSISTOR		
Q2204	or 2SD601A/QRS/-X	TRANSISTOR		
Q2204	or 2SC3928A/QRS/-X	TRANSISTOR		
Q2255	DTC114EKA-X	TRANSISTOR		
Q2255	or UN2211-X	TRANSISTOR		
Q2255	or RT1N141C-X	DIGI TRANSISTOR		
Q3004	2SC2412K/QRS/-X	TRANSISTOR		
Q3004	or 2SD601A/QRS/-X	TRANSISTOR		
Q3004	or 2SC3928A/QRS/-X	TRANSISTOR		
Q3007	UN221E-X	TRANSISTOR		
Q3007	or DTC144WKA-X	DIGI TRANSISTOR		
Q3007	or RT1N44HC-X	DIGI TRANSISTOR		
Q3011	DTC114GKA-X	DIGI TRANSISTOR		
Q3011	or DTC144GKA-X	DIGI TRANSISTOR		
Q3012	DTC114GKA-X	DIGI TRANSISTOR		
Q3012	or DTC144GKA-X	DIGI TRANSISTOR		
Q3013	DTC114GKA-X	DIGI TRANSISTOR		
Q3013	or DTC144GKA-X	DIGI TRANSISTOR		
Q3014	DTC114GKA-X	DIGI TRANSISTOR		
Q3014	or DTC144GKA-X	DIGI TRANSISTOR		
Q3015	DTC114GKA-X	DIGI TRANSISTOR		
Q3015	or DTC144GKA-X	DIGI TRANSISTOR		
Q3016	DTC114GKA-X	DIGI TRANSISTOR		
Q3016	or DTC144GKA-X	DIGI TRANSISTOR		
Q3017	DTC114GKA-X	DIGI TRANSISTOR		
Q3017	or DTC144GKA-X	DIGI TRANSISTOR		
Q3302	PTZ-NV16A	IC(PHOTO SENSOR)		
Q3303	PTZ-NV16A	IC(PHOTO SENSOR)		
Q3304	2SC2412K/QRS/-X	TRANSISTOR		
Q3304	or 2SD601A/QRS/-X	TRANSISTOR		
Q3304	or 2SC3928A/QRS/-X	TRANSISTOR		
Q3305	2SC2412K/QRS/-X	TRANSISTOR		
Q3305	or 2SD601A/QRS/-X	TRANSISTOR		
Q3305	or 2SC3928A/QRS/-X	TRANSISTOR		
Q3401	UN221E-X	TRANSISTOR		
Q3401	or DTC144WKA-X	DIGI TRANSISTOR		
Q3401	or RT1N44HC-X	DIGI TRANSISTOR		
Q3901	UN221E-X	TRANSISTOR		
Q3901	or DTC144WKA-X	DIGI TRANSISTOR		
Q3901	or RT1N44HC-X	DIGI TRANSISTOR		
Q4001	UN2211-X	TRANSISTOR		
Q4001	or DTC114EKA-X	TRANSISTOR		
Q4001	or RT1N141C-X	DIGI TRANSISTOR		
Q7201	2SC1317/RS/-T	TRANSISTOR		
D201	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
D202	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
D203	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
D2001	1SS133-T2	DIODE		
D2001	or 1SS270A-T2	SI DIODE		
D2251	1SS133-T2	DIODE		
D2251	or 1SS270A-T2	SI DIODE		
D3002	1SS133-T2	DIODE		
D3002	or 1SS270A-T2	SI DIODE		
D3003	RD39ES/B3/-T2	Z DIODE		

*The VCR goes to jig RCU mode after replacing the EEPROM and the VCR does not accept some RCU command.

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Therefore please set the VCR to the user RCU mode after replacing the EEPROM.

The method of setting the VCR to the user RCU mode is written on the service manual.

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
D3003	or MTZJ39C-T2	Z DIODE			C207	NDC31HJ-330X	C CAPACITOR	33pF 50V J	
D3004	1A3G-T2	SI DIODE			C209	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	
D3005	1A3G-T2	SI DIODE			C210	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D3008	1SS133-T2	DIODE			C211	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
D3008	or 1SS270A-T2	SI DIODE			C212	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
D3301	LNB2301L01VI	LED			C213	QEKJ1EM-475Z	E CAPACITOR	4.7uF 25V M	
D3303	RD39ES/B3/-T2	Z DIODE			C214	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
D3303	or MTZJ39C-T2	Z DIODE			C215	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
D3304	1A3G-T2	SI DIODE			C217	NDC31HJ-560X	C CAPACITOR	56pF 50V J	
D3305	1A3G-T2	SI DIODE			C218	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D4001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C222	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
D4002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C225	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
D7301	1A3G-T2	SI DIODE			C2001	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
PC3001	RPI-304J	IC(PHOTO SENSOR)			C2002	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
PC3002	RPI-304J	IC(PHOTO SENSOR)			C2003	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C1	NDC31HJ-151X	C CAPACITOR	150pF 50V J		C2005	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C2	NDC31HJ-390X	C CAPACITOR	39pF 50V J	C	C2006	NCB31EK-682X	C CAPACITOR	6800pF 25V K	
C2	NDC31HJ-470X	C CAPACITOR	47pF 50V J	A,B,D,E	C2007	QEKJ1CM-226Z	E CAPACITOR	22uF 16V M	
C3	NDC31HJ-7R0X	C CAPACITOR	7pF 50V J	C	C2008	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C4	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		C2009	NCB31HK-122X	C CAPACITOR	1200pF 50V K	
C5	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2010	NCB31HK-152X	C CAPACITOR	1500pF 50V K	
C6	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2011	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C7	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2012	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C8	NCF31AZ-105X	C CAPACITOR	1uF 10V Z		C2013	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C9	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M		C2051	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
C10	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		C2052	QFV61HJ-823Z	MF CAPACITOR	0.082uF 50V J	
C11	NCF31AZ-105X	C CAPACITOR	1uF 10V Z		C2053	NCB31HK-472X	C CAPACITOR	4700pF 50V K	
C12	NCF31AZ-105X	C CAPACITOR	1uF 10V Z		C2054	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C13	NCF31AZ-105X	C CAPACITOR	1uF 10V Z		C2055	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C14	NCF31AZ-105X	C CAPACITOR	1uF 10V Z		C2201	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C15	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2202	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C17	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2203	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C19	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2204	QEKJ0JM-336Z	E CAPACITOR	33uF 6.3V M	
C20	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2205	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C22	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2206	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C24	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2207	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	
C25	QEKJ1HM-335Z	E CAPACITOR	3.3uF 50V M		C2208	NCB31EK-153X	C CAPACITOR	0.015uF 25V K	
C26	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		C2209	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C27	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2210	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C29	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C	C2211	QEKJ0JM-336Z	E CAPACITOR	33uF 6.3V M	
C30	QCB1HK-331Y	C CAPACITOR	330pF 50V K		C2212	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C31	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		C2214	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C32	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2215	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C33	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		C2216	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C34	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2220	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C35	QCB1HK-103Y	C CAPACITOR	0.01uF 50V K		C2221	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	
C36	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C2222	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C37	NDC31HJ-4R0X	C CAPACITOR	4pF 50V J		C2223	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C38	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2224	NCB31CK-473X	C CAPACITOR	0.047uF 16V K	
C39	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		C2225	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C40	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2226	NCB30JK-105X	C CAPACITOR	1uF 6.3V K	
C41	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2227	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C43	QEKJ1HM-335Z	E CAPACITOR	3.3uF 50V M		C2251	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C44	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M		C2252	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C45	NCB31EK-472X	C CAPACITOR	4700pF 25V K		C2253	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C46	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2254	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C47	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M		C2255	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C48	NCB31EK-223X	C CAPACITOR	0.022uF 25V K		C2256	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C49	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		C2257	QCB1HK-103Y	C CAPACITOR	0.01uF 50V K	
C50	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C	C2258	NDC31HJ-181X	C CAPACITOR	180pF 50V J	
C56	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		C2259	QEKJ1HM-334Z	E CAPACITOR	0.33uF 50V M	
C57	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2261	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C58	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2262	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C59	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2601	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C60	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2602	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C61	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		C2603	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C62	QCB1HK-103Y	C CAPACITOR	0.01uF 50V K		C2604	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C63	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2605	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C64	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2606	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C66	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C	C2607	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C71	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		C2608	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C75	NDC31HJ-390X	C CAPACITOR	39pF 50V J	C	C2609	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C85	QCB1HK-103Y	C CAPACITOR	0.01uF 50V K		C2610	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C201	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M		C2611	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C204	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		C2612	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
C206	NDC31HJ-330X	C CAPACITOR	33pF 50V J		C2613	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	
					C2614	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
					C2615	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
C2616	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		R3	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	A,B,D,E
C2617	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M		R5	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	C
C2618	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		R11	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
C2651	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M		R12	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C2653	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M		R17	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	C
C3007	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		R21	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C3010	QEZ0244-22A	EDL CAPACITOR	0.22F 5.5V Z		R22	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C3014	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		R28	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	C
C3015	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R35	NRSA63J-821X	MG RESISTOR	820Ω 1/16W J	C
C3016	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R36	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C3022	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R37	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
C3024	NDC31HJ-160X	C CAPACITOR	16pF 50V J		R38	NRSA63J-685X	MG RESISTOR	6.8MΩ 1/16W J	
C3025	QAT3725-300Z	TRIM CAPACITOR	30pF TIMER CLOCK		R41	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C3027	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M		R42	QRE141J-471Y	C RESISTOR	470Ω 1/4W J	
C3030	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		R43	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C3031	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R201	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C3032	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R202	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C3033	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R208	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
C3036	NDC31HJ-180X	C CAPACITOR	18pF 50V J		R209	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
C3037	NDC31HJ-120X	C CAPACITOR	12pF 50V J		R210	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
C3038	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		R211	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
C3039	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R212	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
C3042	QETN0JM-477Z	E CAPACITOR	470uF 6.3V M		R213	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C3050	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R216	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C3054	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R224	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C3304	NCB31EK-473X	C CAPACITOR	0.047uF 25V K		R225	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
C3310	QEZ0244-229	EDL CAPACITOR	0.022F 5.5V Z		R226	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C3312	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		R2003	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
C3315	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2005	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J	
C3316	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2007	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
C3322	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2008	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C3324	NDC31HJ-120X	C CAPACITOR	12pF 50V J		R2010	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
C3327	QERF1CM-106Z	E CAPACITOR	10uF 16V M		R2013	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
C3330	QERF1CM-476Z	E CAPACITOR	47uF 16V M		R2014	NRSA63J-394X	MG RESISTOR	390kΩ 1/16W J	
C3331	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2015	NRSA63J-331X	MG RESISTOR	330Ω 1/16W J	
C3332	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2016	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
C3333	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2017	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
C3336	NDC31HJ-180X	C CAPACITOR	18pF 50V J		R2018	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C3337	NDC31HJ-120X	C CAPACITOR	12pF 50V J		R2019	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C3341	NDC31HJ-180X	C CAPACITOR	18pF 50V J		R2021	NRSA63J-333X	MG RESISTOR	33kΩ 1/16W J	
C3342	QETJ0JM-477Z	E CAPACITOR	470uF 6.3V M		R2022	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C3350	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2023	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
C3354	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2053	NRSA63J-392X	MG RESISTOR	3.9kΩ 1/16W J	
C3355	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R2054	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	
C3371	QEKJ1HM-336Z	E CAPACITOR	33uF 50V M		R2055	NRSA63J-3R3X	MG RESISTOR	3.3Ω 1/16W J	
C4002	NCB31HK-103X	C CAPACITOR	0.01uF 50V K		R2056	QRE141J-560Y	C RESISTOR	56Ω 1/4W J	
C4004	QERF1CM-226Z	E CAPACITOR	22uF 16V M		R2057	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C4006	QERF0JM-476Z	E CAPACITOR	47uF 6.3V M		R2058	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
C4008	NCB30JK-105X	C CAPACITOR	1uF 6.3V K		R2059	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C4009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R2060	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
C4010	NCB31EK-223X	C CAPACITOR	0.022uF 25V K		R2201	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C4011	NCB31EK-104X	C CAPACITOR	0.1uF 25V K		R2202	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
C4012	NCB31CK-224X	C CAPACITOR	0.22uF 16V K		R2203	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C4014	NDC31HJ-101X	C CAPACITOR	100pF 50V J		R2204	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
C4015	NDC31HJ-221X	C CAPACITOR	220pF 50V J		R2205	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C4018	NCB31HK-102X	C CAPACITOR	1000pF 50V K		R2206	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
C4031	QEKJ1CM-336Z	E CAPACITOR	33uF 16V M		R2207	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
C7110	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		R2208	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	
C7111	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M		R2209	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
C7112	NCB31EK-103X	C CAPACITOR	0.01uF 25V K		R2210	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C7116	NDC31HJ-470X	C CAPACITOR	47pF 50V J		R2211	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
C7117	NDC31HJ-470X	C CAPACITOR	47pF 50V J		R2212	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
C7118	NDC31HJ-470X	C CAPACITOR	47pF 50V J		R2213	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C7119	NDC31HJ-470X	C CAPACITOR	47pF 50V J		R2214	NRSA63J-681X	MG RESISTOR	680Ω 1/16W J	
C7201	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M		R2215	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
C7501	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R2218	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
C7502	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2219	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	
C7503	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M		R2220	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
C7504	NDC31HJ-151X	C CAPACITOR	150pF 50V J		R2222	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C7505	NDC31HJ-151X	C CAPACITOR	150pF 50V J		R2223	NRSA63J-511X	MG RESISTOR	510Ω 1/16W J	
C7506	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2224	NRSA63J-511X	MG RESISTOR	510Ω 1/16W J	
C7507	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M		R2225	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
C7508	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2226	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
C7509	NCB31CK-104X	C CAPACITOR	0.1uF 16V K		R2227	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
					R2228	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R1	NRSA63J-622X	MG RESISTOR	6.2kΩ 1/16W J		R2229	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R2	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J		R2230	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R3	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	C	R2231	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R2232	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R3050	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2233	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		R3051	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2234	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R3052	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2239	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3053	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2240	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3054	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2241	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R3055	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2242	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		R3059	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2243	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R3060	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2244	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		R3061	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2251	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		R3062	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2252	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		R3063	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2253	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R3066	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2255	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R3069	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R2601	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R3071	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R2602	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R3072	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2603	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3073	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2604	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R3074	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	C
R2605	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J		R3075	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R2606	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3076	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R2607	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		R3077	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2608	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R3078	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2609	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3079	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2610	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R3080	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2611	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R3081	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R2612	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R3083	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2613	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R3086	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2614	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R3087	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2615	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R3088	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2631	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3089	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2632	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R3090	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2633	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		R3091	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2634	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R3092	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2635	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R3093	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2652	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3094	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2653	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R3095	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2654	NRSA63J-153X	MG RESISTOR	15kΩ 1/16W J		R3096	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2655	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R3098	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2656	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R3107	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2657	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J		R3108	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R2658	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R3213	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R2659	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R3214	NRSA63J-334X	MG RESISTOR	330kΩ 1/16W J	
R2660	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R3218	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R2661	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		R3219	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3220	QRE141J-104Y	C RESISTOR	100kΩ 1/4W J	
R3004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3223	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3224	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3011	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3229	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J	
R3012	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3230	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3013	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3231	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R3014	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3233	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3015	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3234	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3016	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3235	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R3017	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		R3236	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R3018	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3239	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3019	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3240	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3020	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3242	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3021	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3245	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A,B,D,E
R3022	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J		R3251	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3024	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3256	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3025	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3257	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3026	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3258	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R3029	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3311	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3030	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3312	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	C
R3031	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3313	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3032	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3314	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3034	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3315	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3035	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3317	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3036	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3318	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R3038	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3322	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3039	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3325	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3040	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3326	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3041	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3327	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3042	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3330	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3044	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3334	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3046	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3335	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3047	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3336	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R3048	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R3337	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3049	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R3338	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
R3340	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7501	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R3346	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7502	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R3347	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7503	NRSA63J-4R7X	MG RESISTOR	4.7Ω 1/16W J	
R3348	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		R7504	NRSA63J-820X	MG RESISTOR	82Ω 1/16W J	
R3349	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7505	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R3350	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		R7506	NRSA63J-100X	MG RESISTOR	10Ω 1/16W J	
R3351	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		R7507	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J	
R3352	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		L2	QQL071J-221Y	COIL	20.0Ω 220uH J	C
R3353	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		L3	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
R3354	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		L5	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
R3355	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		L6	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
R3356	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		L7	QQR0967-001	CHOKO COIL		
R3357	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		L10	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
R3359	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		L14	QQL071J-101Y	COIL	10.80Ω 100uH J	C
R3362	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		L201	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
R3363	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		L203	QQL37CJ-220Z	COIL	1.30Ω 22uH J	
R3366	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		L204	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
R3369	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		L206	QQL071J-220Y	COIL	2.20Ω 22uH J	
R3371	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		L2251	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
R3372	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		L2252	QQL29BJ-151Z	P COIL	4.80Ω 150uH J	
R3373	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		L3001	QQL231J-R22Y	COIL	0.40Ω 0.22uH J	
R3374	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		L7101	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
R3375	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		L7201	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
R3376	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J		L7501	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
R3377	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	C	L7502	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
R3379	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		T2051	PELN0832	OSC TRANS		
R3380	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		B1	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3381	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		B2	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3385	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		B4	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A,B,D,E
R3386	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		B7	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3388	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		B8	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R3390	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		B9	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R3403	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		B203	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3405	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		B3461	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3407	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C	B3462	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3505	QRE141J-181Y	C RESISTOR	180Ω 1/4W J		B3466	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3506	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J		B3502	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3507	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J		B3504	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3508	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J		B3961	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3509	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J		B3962	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3510	NRSA63J-121X	MG RESISTOR	120Ω 1/16W J		B3966	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R3511	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J		CN1	QGF1201C2-09	CONNECTOR	FFC/FPC (1-9)	
R3513	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		CN2001	QGF1207C1-06	CONNECTOR	FFC/FPC (1-6)	
R3514	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		CN2002	QGB2532J1-02	CONNECTOR	B-B (1-2)	
R3515	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		CN2601	QGB1231L1-11	CONNECTOR	B-B (1-11)	
R3516	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		CN3001	QGB2032M4-12	CONNECTOR	B-B (1-12)	
R3517	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		CN3102	QGF1207C1-11	CONNECTOR	FFC/FPC (1-11)	
R3518	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		CN3103	QGB1231L1-15	CONNECTOR	B-B (1-15)	
R3519	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		CN3401	QGF1207C1-06	CONNECTOR	FFC/FPC (1-6)	
R3520	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		CN3901	QGF1207C1-06	CONNECTOR	FFC/FPC (1-6)	
R3522	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		CN5311	QGB1231M1-15	CONNECTOR	B-B (1-15)	
R3523	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		CN7111	QGF1207C1-09	CONNECTOR	FFC/FPC (1-9)	
R3524	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		CN7112	QGF1207C1-13	CONNECTOR	FFC/FPC (1-13)	
R3529	NRSA63J-105X	MG RESISTOR	1MΩ 1/16W J		CN7113	QGB2024K1-14S	CONNECTOR	B-B (1-14)	
R3530	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J		CN7114	QGB2024K1-14S	CONNECTOR	B-B (1-14)	
R3531	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		CN7115	QGB2024K1-17S	CONNECTOR	B-B (1-17)	
R3535	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		CN7116	QGF1207C1-14	CONNECTOR	FFC/FPC (1-14)	
R3536	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J		CN7117	QGF1207C1-13	CONNECTOR	FFC/FPC (1-13)	
R3541	NRSA63J-104X	MG RESISTOR	100kΩ 1/16W J		CN7118	QGF1207C1-07	CONNECTOR	FFC/FPC (1-7)	
R3553	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		CN7119	QGF1207C1-15	CONNECTOR	FFC/FPC (1-15)	C
R3564	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		△ CP3002	QMFZ050-1R25X-E	FUSE	1.25A 125V	
R4003	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J		△ CP4002	QMFZ050-1R25X-E	FUSE	1.25A 125V	
R4004	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J		J7009	QNN0096-001	PIN JACK	OAXIAL OUT	
R4005	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		J7010	GP1FA313TZ	OPT TRANSMITTER	OPTICAL OUT	
R4007	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		J7201	QNS0100-001	3.5 JACK	SAT CONTROL	
R4008	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		JS3001	NSW0238-001	ROTARY ENCODER		
R4009	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		K2001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4010	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		K2002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4012	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J		K2003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4013	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		K2004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4015	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J		K2251	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R4017	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J		K2252	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7101	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J		K3001	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7102	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J		K3002	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7201	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J		K3003	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7202	NRSA63J-221X	MG RESISTOR	220Ω 1/16W J		K3004	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R7203	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J						
R7204	QRE121J-100Y	C RESISTOR	10Ω 1/2W J						

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
K3005	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q901	2SC2412K/QRS/-X	TRANSISTOR		
K3006	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q902	2SC2412K/QRS/-X	TRANSISTOR		
K3007	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q903	DTC144WKA-X	DIGI TRANSISTOR		
K3008	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q904	DTC144WKA-X	DIGI TRANSISTOR		
K3009	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q907	2SA1037AK/QR/-X	TRANSISTOR		
K3010	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q908	2SA1037AK/QR/-X	TRANSISTOR		
K3011	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q912	2SA1037AK/QR/-X	TRANSISTOR		
K7501	NQR0147-004X	FERRITE BEADS			Q913	2SA1037AK/QR/-X	TRANSISTOR		
K7502	NQR0147-004X	FERRITE BEADS			Q917	2SC2412K/QRS/-X	TRANSISTOR		
K7503	NQR0147-004X	FERRITE BEADS			Q917	or 2SD601A/QRS/-X	TRANSISTOR		
OT1	LP31378-001A	BOSS(MECHA)3			Q917	or 2SC3928A/QRS/-X	TRANSISTOR		
OT2	LP31379-001A	BOSS(MECHA)4 (x2)			Q918	2SC2412K/QRS/-X	TRANSISTOR		
S3001	QSW0602-004	PUSH SWITCH	REC.SAFETY		Q918	or 2SD601A/QRS/-X	TRANSISTOR		
SD1	LP31179-001A	SHILD PLATE(PRE/REC)			Q918	or 2SC3928A/QRS/-X	TRANSISTOR		
W1	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q919	DTA144WKA-X	TRANSISTOR		
W2	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q919	or UN211E-X	DIGI TRANSISTOR		
W3	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q919	or RT1P44HC-X	DIGI TRANSISTOR		
W4	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q932	2SA1576A/QR/-X	TRANSISTOR		
W5	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q932	or 2PA1576/R/-X	TRANSISTOR		
W6	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q932	or 2SB1218A/QR/-X	TRANSISTOR		
W7	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q933	2SA1576A/QR/-X	TRANSISTOR		
W8	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q933	or 2PA1576/R/-X	TRANSISTOR		
W10	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q933	or 2SB1218A/QR/-X	TRANSISTOR		
W11	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q936	2SA1576A/QR/-X	TRANSISTOR		
W12	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q936	or 2PA1576/R/-X	TRANSISTOR		
W13	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q936	or 2SB1218A/QR/-X	TRANSISTOR		
W14	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q941	2SA1037AK/QR/-X	TRANSISTOR		
W15	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q942	DTC114TKA-X	TRANSISTOR		
W16	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q943	DTC144WKA-X	DIGI TRANSISTOR		
W17	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		Q944	DTC114EKA-X	TRANSISTOR		
W18	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
W19	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		D902	QRE141J-181Y	C RESISTOR	180Ω 1/4W J	
W20	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		D904	MTZJ9.1B-T2	Z DIODE		
W21	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		D904	or RD9.1ES/B2/-T2	Z DIODE		
W22	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		D905	1SS133-T2	DIODE		
W23	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		D905	or 1SS270A-T2	SI DIODE		
W24	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J						
W25	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C901	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
W26	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C902	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
W27	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C903	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
W29	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C904	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
W30	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C905	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
W31	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C906	NCB31HK-471X	C CAPACITOR	470pF 50V K	
W32	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C907	NCB31HK-471X	C CAPACITOR	470pF 50V K	
W33	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C908	NCB31HK-471X	C CAPACITOR	470pF 50V K	
W34	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C909	NCB31HK-471X	C CAPACITOR	470pF 50V K	
W35	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C914	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
W36	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C915	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
W37	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C916	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
W40	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C917	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
W41	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C918	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
W42	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C919	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
W43	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C920	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
W45	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C921	NDC31HJ-331X	C CAPACITOR	330pF 50V J	
W46	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J		C922	NCB31HK-471X	C CAPACITOR	470pF 50V K	
WR2	QUB321-06ZAZA	SIN TWIST WIRE			C923	NCB31HK-471X	C CAPACITOR	470pF 50V K	
WR3	QUB321-04ZAZA	SIN TWIST WIRE			C924	NCB31HK-471X	C CAPACITOR	470pF 50V K	
X1	QAX0740-001	CRYSTAL	4.433619MHz		C925	NCB31HK-471X	C CAPACITOR	470pF 50V K	
X3001	QAX0445-001	CRYSTAL	32.768kHz		C930	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
X3002	QAX0527-001	CRYSTAL	10.000000MHz		C932	NCF31EZ-104X	C CAPACITOR	0.1uF 25V Z	
X3301	QAX0444-001	CRYSTAL	32.768kHz		C934	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
X3302	QAX0527-001	CRYSTAL	10.000000MHz		C935	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	

Terminal board

Block No. [0][6]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10233-01D3	TERMINAL BOARD ASSY		A,B,D,E
PW1	LPA10233-02C3	TERMINAL BOARD ASSY		C
IC901	HA118226F	IC		
IC902	BA7623F-X	SOP IC		

C942	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C943	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C944	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C945	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C946	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C947	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C948	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C949	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C950	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C951	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C952	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C953	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local
C954	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C955	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C956	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C957	NDC31HJ-101X	C CAPACITOR	100pF 50V J	
C960	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C961	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C962	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C963	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C964	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C965	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C968	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C971	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	
C973	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C981	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C982	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C983	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C986	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C988	NCB31HK-102X	C CAPACITOR	1000pF 50V K	
C991	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C992	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C994	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C996	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C997	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
R901	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R902	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	
R903	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	
R904	NRSA63J-474X	MG RESISTOR	470kΩ 1/16W J	
R909	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R910	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R911	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R912	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R913	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R914	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R915	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R918	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R919	QRE141J-131Y	C RESISTOR	130Ω 1/4W J	
R920	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R921	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R922	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R923	NRSA63J-750X	MG RESISTOR	75Ω 1/16W J	
R924	NRSA63D-680X	MG RESISTOR	68Ω 1/16W D	
R925	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R926	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R927	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R928	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R937	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R939	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R940	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R943	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R944	QRE121J-331Y	C RESISTOR	330Ω 1/2W J	
R945	QRE121J-331Y	C RESISTOR	330Ω 1/2W J	
R949	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R950	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R951	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R952	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R953	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R954	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R960	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R961	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R965	QRE121J-331Y	C RESISTOR	330Ω 1/2W J	
R966	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R967	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R968	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R969	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R976	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R977	QRE141J-473Y	C RESISTOR	47kΩ 1/4W J	
R978	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R985	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R986	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R987	NRSA63D-750X	MG RESISTOR	75Ω 1/16W D	
R988	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R989	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R990	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	
R991	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	
R992	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R993	NRSA63J-393X	MG RESISTOR	39kΩ 1/16W J	
R994	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	

△ Symbol No.	Part No.	Part Name	Description	Local
R999	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
L901	QQL071J-100Y	COIL	1.40Ω 10uH J	
L902	QQL071J-100Y	COIL	1.40Ω 10uH J	
L903	QQL071J-1R0Y	COIL	0.46Ω 1uH J	
L904	QQL071J-4R7Y	COIL	1.00Ω 4.7uH J	
L905	QQL071J-4R7Y	COIL	1.00Ω 4.7uH J	
L906	QQL071J-100Y	COIL	1.40Ω 10uH J	
L907	QQL071J-100Y	COIL	1.40Ω 10uH J	
L908	QQL231J-R22Y	COIL	0.40Ω 0.22uH J	
L909	QQL071J-4R7Y	COIL	1.00Ω 4.7uH J	
L910	QQL071J-4R7Y	COIL	1.00Ω 4.7uH J	
L914	QQL071J-1R0Y	COIL	0.46Ω 1uH J	
L917	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L918	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L919	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L931	QQL071J-100Y	COIL	1.40Ω 10uH J	
L932	QQL071J-100Y	COIL	1.40Ω 10uH J	
L933	QQL071J-100Y	COIL	1.40Ω 10uH J	
L934	QQL071J-100Y	COIL	1.40Ω 10uH J	
CN913	QGB2024J1-14S	CONNECTOR	B-B (1-14)	
CN914	QGB2024J1-14S	CONNECTOR	B-B (1-14)	
CN915	QGB2024J1-17S	CONNECTOR	B-B (1-17)	
ET1	QNZ0431-001Z	EARTH TERMINAL		
J901	QNZ0627-001	21P CONNECTOR	L-1 IN/OUT	
J902	QNZ0627-001	21P CONNECTOR	L-2 IN/OUT	
J905	QNN0599-002	PIN JACK	COMPONENT VIDEO OUT	
J907	QNN0295-002	PIN JACK	AUDIO OUT	
W101	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W102	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W103	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W104	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W105	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W106	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W107	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
WR95	QUB321-07ZAZA	SIN TWIST WIRE		A,C,D,E
WR96	QUB321-07ZAZA	SIN TWIST WIRE		A,C,D,E

A/C head board

Block No. [1][2]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10158-01A1	A/C HEAD BOARD ASSY		

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

Demod board

Block No. [1][4]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10094-16A	DEMOM BOARD ASSY		C
PW1	LPA10094-15A	DEMOM BOARD ASSY		A,B,D,E
IC6701	MSP3417G-X	IC		
IC6701	or MSP3417GQGB8V3X	IC		
Q6701	2SC3936/BC/-X	TRANSISTOR		
D6701	1SS133-T2	DIODE		
D6701	or 1SS270A-T2	SI DIODE		
C6701	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C6704	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C6707	NDC21HJ-470X	C CAPACITOR	47pF 50V J	
C6708	NDC21HJ-100X	C CAPACITOR	10pF 50V J	C
C6708	NDC21HJ-8R0X	C CAPACITOR	8pF 50V J	A,B,D,E
C6709	NDC21HJ-100X	C CAPACITOR	10pF 50V J	C
C6709	NDC21HJ-8R0X	C CAPACITOR	8pF 50V J	A,B,D,E
C6713	NCF21CZ-224X	C CAPACITOR	0.22uF 16V Z	
C6714	NCB21HK-222X	C CAPACITOR	2200pF 50V K	
C6715	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C6716	NCB21HK-222X	C CAPACITOR	2200pF 50V K	
C6717	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C6719	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C6720	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C6721	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C6723	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C6724	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	C
R6701	NRSA02J-392X	MG RESISTOR	3.9kΩ 1/10W J	
R6702	NRSA02J-682X	MG RESISTOR	6.8kΩ 1/10W J	
R6703	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
R6704	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R6705	NRSA02J-271X	MG RESISTOR	270Ω 1/10W J	
R6707	NRSA02J-330X	MG RESISTOR	33Ω 1/10W J	
R6708	NQR0200-003X	FERRITE BEADS		C
R6708	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	A,B,D,E
R6709	NQR0200-003X	FERRITE BEADS		C
R6709	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	A,B,D,E
R6710	NRSA02J-120X	MG RESISTOR	12Ω 1/10W J	C
R6710	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	A,B,D,E
R6711	NRSA02J-104X	MG RESISTOR	100kΩ 1/10W J	
R6712	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R6713	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
R6714	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R6715	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
R6716	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
R6719	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R6720	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
R6721	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
BK1	LP40425-001A	BRACKET(BOARD ASSY)		
CN6701	QGG2502K1-10	CONNECTOR (1-10)		
K6701	NQR0200-003X	FERRITE BEADS		
K6702	NQR0200-003X	FERRITE BEADS		
K6703	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	C
K6703	NQR0200-003X	FERRITE BEADS		A,B,D,E
K6704	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	C
K6704	NQR0200-003X	FERRITE BEADS		A,B,D,E
K6705	NQR0200-003X	FERRITE BEADS		
K6706	NQR0200-003X	FERRITE BEADS		
K6707	NQR0200-003X	FERRITE BEADS		C
W6701	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
X6701	QAX0773-001Z	CRYSTAL	18.432000MHZ	

Tuner board

Block No. [2][4]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10233-01D1	TUNER BOARD ASSY		A,B,D,E
PW1	LPA10233-02C1	TUNER BOARD ASSY		C
Q6001	2SD2144S/UV/-T	TRANSISTOR		
Q6030	2SA1037AK/QR/-X	TRANSISTOR		
Q6031	DTC114EKA-X	TRANSISTOR		
Q6130	2SA1037AK/QR/-X	TRANSISTOR		
Q6131	DTC114EKA-X	TRANSISTOR		
D6002	HZ30-2L-T2	Z DIODE		
D6002	or HZ30-2LTD	Z DIODE		
C6001	QEKJ0JM-107Z	E CAPACITOR	100uF 6.3V M	
C6002	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C6037	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	C
C6114	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	A,B,D,E
C6137	QEKJ1CM-106Z	E CAPACITOR	10uF 16V M	
C6501	QEKJ0JM-337Z	E CAPACITOR	330uF 6.3V M	
C6502	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C6503	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
C6603	NCB31HK-103X	C CAPACITOR	0.01uF 50V K	
R6001	NRSA63J-470X	MG RESISTOR	47Ω 1/16W J	
R6002	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R6020	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6021	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6030	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R6031	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R6032	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	C
R6033	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	C
R6080	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R6120	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6121	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R6130	QRE141J-332Y	C RESISTOR	3.3kΩ 1/4W J	
R6131	NRSA63J-101X	MG RESISTOR	100Ω 1/16W J	
R6132	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	C
R6132	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	A,B,D,E
R6133	NRSA63J-183X	MG RESISTOR	18kΩ 1/16W J	C
L6001	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L6002	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L6005	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L6101	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L6102	QQL29BK-1R0Z	P COIL	0.14Ω 1uH K	
L6501	QQL29BJ-3R3Z	P COIL	0.24Ω 3.3uH J	
L6601	QQL29BJ-3R3Z	P COIL	0.24Ω 3.3uH J	
BK1	LP21286-001A	BRACKET(TUNER)		
CD1	QAM0641-001	RF CABLE		
CD2	QAM0641-001	RF CABLE		
CD3	QAM0641-001	RF CABLE		
CN6001	QGF1207F1-14	CONNECTOR	FFC/FPC (1-14)	
CN6002	QGF1207F1-13	CONNECTOR	FFC/FPC (1-13)	
CN6003	QGF1207F1-07	CONNECTOR	FFC/FPC (1-7)	
OT1	LP31391-001A	SPECIAL SCREW	TUNER(x6)	
OT2	LP40229-002A	PLATE		
OT3	LP40229-002A	PLATE		
TU6001	QAU0299-001	TUNER		C
TU6001	QAU0323-001	TUNER		A,B,D,E
TU6002	QAU0299-001	TUNER		C
TU6002	QAU0323-001	TUNER		A,B,D,E
TU6003	QNZ0681-001	RF CONNECTOR		

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

Operation / jack board

Block No. [2][7]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10248-01C5	OPERATION/JACK BOARD ASSY		
D7202	1SS133-T2	DIODE		
D7202	or 1SS270A-T2	SI DIODE		
D7203	1SS133-T2	DIODE		
D7203	or 1SS270A-T2	SI DIODE		
D7204	RD6.8ES/B1/-T2	Z DIODE		
D7204	or MTZJ6.8A-T2	Z DIODE		
D7221	SLA-580BC3T3F	LED	ILLUMI.	
D7221	or SLA-580BCT3F	LED	ILLUMI.	
D7221	or SDBP50A0/DEGH/	LED	ILLUMI.	
D7222	SLR-325VC-T	LED	VCR REC	
D7222	or LTL-816EE-T	LED	VCR REC	
D7223	SLR-325MC-T	LED	VCR	
D7223	or LTL-816GE-T	LED	VCR	
D7223	or SLR-343MC-T	LED	VCR	
D7224	SLR-325VC-T	LED	VCR TIMER	
D7224	or LTL-816EE-T	LED	VCR TIMER	
C7202	NDC21HJ-101X	C CAPACITOR	100pF 50V J	
C7203	QCBB1HJ-101Y	C CAPACITOR	100pF 50V J	
C7204	NDC21HJ-101X	C CAPACITOR	100pF 50V J	
C7205	QCBB1HJ-101Y	C CAPACITOR	100pF 50V J	
C7206	NCB21HK-103X	C CAPACITOR	0.01uF 50V K	
C7221	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
R7202	QRE141J-750Y	C RESISTOR	75Ω 1/4W J	
R7206	NRSA02J-750X	MG RESISTOR	75Ω 1/10W J	
R7207	NRSA02J-750X	MG RESISTOR	75Ω 1/10W J	
R7221	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R7222	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
R7223	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
R7224	NRSA02J-331X	MG RESISTOR	330Ω 1/10W J	
R7225	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
L7202	QQL071J-100Y	COIL	1.40Ω 10uH J	
L7203	QQL071J-100Y	COIL	1.40Ω 10uH J	
CN7201	QGF1209F1-13	CONNECTOR	FFC/FPC (1-13)	
CN7202	QGD2503C1-05	CONNECTOR	(1-5)	
J7201	QNN0591-001	PIN JACK	VIDEO/AUDIO	
J7204	QND0084-001	S JACK	S-VIDEO	
S7216	QSW0381-001Z	TACT SWITCH	VCR_EJECT	
S7217	QSW0381-001Z	TACT SWITCH	VCR/DVD	
S7218	QSW0381-001Z	TACT SWITCH	STANDBY/ON	
W71	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W72	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
WR7201	QUB221-10A4XL	SIN TWIST WIRE		

Switch / display board

Block No. [2][8]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10248-01C4	SWITCH/DISPLAY BOARD ASSY		
IC7001	UPD16315GB-3BS	IC		
IC7001	or PT6315	IC		
IC7002	GP1UM281XK	IR DETECT UNIT	38kHz	
IC7002	or PNA4652M00XB	IR DETECT UNIT	38kHz	
D7001	1SS133-T2	DIODE		
D7001	or 1SS270A-T2	SI DIODE		
D7002	1SS133-T2	DIODE		
D7002	or 1SS270A-T2	SI DIODE		
D7003	1SS133-T2	DIODE		
D7003	or 1SS270A-T2	SI DIODE		
D7004	1SS133-T2	DIODE		
D7004	or 1SS270A-T2	SI DIODE		
D7005	1SS133-T2	DIODE		

△ Symbol No.	Part No.	Part Name	Description	Local
D7005	or 1SS270A-T2	SI DIODE		
D7012	1SS133-T2	DIODE		
D7012	or 1SS270A-T2	SI DIODE		
D7013	1SS133-T2	DIODE		
D7013	or 1SS270A-T2	SI DIODE		
D7014	1SS133-T2	DIODE		
D7014	or 1SS270A-T2	SI DIODE		
D7015	1SS133-T2	DIODE		
D7015	or 1SS270A-T2	SI DIODE		
D7021	RD9.1ES/B2/-T2	Z DIODE		
D7021	or MTZJ9.1B-T2	Z DIODE		
D7041	SLR-325VC-T	LED	DVD REC	
D7041	or LTL-816EE-T	LED	DVD REC	
D7042	SLR-325MC-T	LED	VCR->DVD	
D7042	or LTL-816GE-T	LED	VCR->DVD	
D7042	or SLR-343MC-T	LED	VCR->DVD	
D7043	SLR-325VC-T	LED	DUBBING	
D7043	or LTL-816EE-T	LED	DUBBING	
D7044	SLR-325MC-T	LED	DVD->VCR	
D7044	or LTL-816GE-T	LED	DVD->VCR	
D7044	or SLR-343MC-T	LED	DVD->VCR	
D7045	SLA-580BC3T3F	LED	ILLUMI.	
D7045	or SLA-580BCT3F	LED	ILLUMI.	
D7045	or SDBP50A0/DEGH/	LED	ILLUMI.	
D7046	SLR-325VC-T	LED	DVD TIMER	
D7046	or LTL-816EE-T	LED	DVD TIMER	
D7047	SLR-325MC-T	LED	DVD	
D7047	or LTL-816GE-T	LED	DVD	
D7047	or SLR-343MC-T	LED	DVD	
C7001	NCB21EK-104X	C CAPACITOR	0.1uF 25V K	
C7002	QCFB1HZ-104Y	C CAPACITOR	0.1uF 50V Z	
C7003	QEKJ1HM-106Z	E CAPACITOR	10uF 50V M	
C7006	QEKCOJM-227Z	E CAPACITOR	220uF 6.3V M	
C7008	QERF1AM-227Z	E CAPACITOR	220uF 10V M	
C7010	NCF31HZ-473X	C CAPACITOR	0.047uF 50V Z	
C7011	NCF31HZ-473X	C CAPACITOR	0.047uF 50V Z	
C7013	QCBB1HK-103Y	C CAPACITOR	0.01uF 50V K	
R7001	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7002	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7003	QRE141J-823Y	C RESISTOR	82kΩ 1/4W J	
R7005	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R7006	QRE141J-472Y	C RESISTOR	4.7kΩ 1/4W J	
R7007	QRE141J-102Y	C RESISTOR	1kΩ 1/4W J	
R7009	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
R7010	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
R7013	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
R7014	QRE141J-333Y	C RESISTOR	33kΩ 1/4W J	
R7015	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
R7041	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7042	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7043	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7044	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7045	QRE141J-101Y	C RESISTOR	100Ω 1/4W J	
R7046	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7047	QRE141J-331Y	C RESISTOR	330Ω 1/4W J	
R7053	QRE141J-103Y	C RESISTOR	10kΩ 1/4W J	
CN7001	QGF1207C1-11	CONNECTOR	FFC/FPC (1-11)	
CN7002	QGF1209C1-04	CONNECTOR	FFC/FPC (1-4)	
DI7001	QLF0124-001	FL TUBE		
FW7001	QUM025-07A4BF	PARA RIBON WIRE		
HD1	PQ34949-1-1	FDP HOLDER(L)		
HD2	PQ34950-1-1	FDP HOLDER(R)		
OT1	LP30002-0F8A	SPACER		
S7002	QSW0381-001Z	TACT SWITCH	PR+	
S7004	QSW0381-001Z	TACT SWITCH	VCR-DVD	
S7005	QSW0381-001Z	TACT SWITCH	DUB	
S7012	QSW0381-001Z	TACT SWITCH	DVD-VCR	
S7013	QSW0381-001Z	TACT SWITCH	SLOW+	
S7014	QSW0381-001Z	TACT SWITCH	PAUSE	
S7015	QSW0381-001Z	TACT SWITCH	STOP	
S7022	QSW0381-001Z	TACT SWITCH	PR-	
S7023	QSW0381-001Z	TACT SWITCH	REC MODE	
S7024	QSW0381-001Z	TACT SWITCH	SAT	
S7032	QSW0381-001Z	TACT SWITCH	OPEN/CLOSE	
S7033	QSW0381-001Z	TACT SWITCH	SLOW-	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local
S7034	QSW0381-001Z	TACT SWITCH	REC	
S7035	QSW0381-001Z	TACT SWITCH	PLAY	
W41	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W43	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
W44	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	

Jack board

Block No. [3][6]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10248-01C3	JACK BOARD ASSY		
B4121	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B4122	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B4123	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
B4124	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
CN4104	QGB2027M1-10S	CONNECTOR	B-B (1-10)	
J4112	QNZ0675-001	D CONNECTOR	DV IN	
K4101	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K4102	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K4103	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
K4104	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
OT1	QZW0021-001	PC SUPPORT		
W31	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	

Loading motor board

Block No. [5][5]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10158-01A2	LOADING MOTOR BOARD ASSY		

Video switch board

Block No. [8][3]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10233-02C2	VIDEO SWITCH BOARD ASSY		C
PW1	LPA10233-01C2	VIDEO SWITCH BOARD ASSY		A,B,D,E
IC501	JCP8038-I	IC		
IC501	or JCP8038	IC		
IC502	LC74793	IC		
Q503	2SD601A/QRS/-X	TRANSISTOR		
Q503	or 2SC2412K/QRS/-X	TRANSISTOR		
Q503	or 2SC3928A/QRS/-X	TRANSISTOR		
Q504	2SB709A/QR/-X	TRANSISTOR		
Q504	or 2SA1037AK/QR/-X	TRANSISTOR		
Q504	or 2SA1530A/QR/-X	TRANSISTOR		
Q505	2SB709A/QR/-X	TRANSISTOR		
Q505	or 2SA1037AK/QR/-X	TRANSISTOR		
Q505	or 2SA1530A/QR/-X	TRANSISTOR		
Q506	2SB709A/QR/-X	TRANSISTOR		
Q506	or 2SA1037AK/QR/-X	TRANSISTOR		
Q506	or 2SA1530A/QR/-X	TRANSISTOR		
D501	DA204U-X	SI DIODE		
D502	DA204U-X	SI DIODE		
C501	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C502	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C503	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C505	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C506	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	

△ Symbol No.	Part No.	Part Name	Description	Local
C508	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C510	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C512	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C513	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C515	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C516	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C518	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C519	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C521	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C522	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C523	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C524	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C525	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C526	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C527	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C528	QEKJ1EM-106Z	E CAPACITOR	10uF 25V M	
C529	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C530	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C533	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C534	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C535	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C536	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C537	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C539	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C540	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C541	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C543	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C545	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	
C546	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C547	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C549	NDC31HJ-100X	C CAPACITOR	10pF 50V J	
C550	NDC31HJ-820X	C CAPACITOR	82pF 50V J	
C556	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C557	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	
C558	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	
C559	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C571	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C572	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	
C573	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C574	NCF31AZ-105X	C CAPACITOR	1uF 10V Z	
C577	NCB31CK-563X	C CAPACITOR	0.056uF 16V K	
C578	QEKJ1HM-475Z	E CAPACITOR	4.7uF 50V M	
C579	NCB31AK-224X	C CAPACITOR	0.22uF 10V K	
C580	QEKJ0JM-227Z	E CAPACITOR	220uF 6.3V M	
C581	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	

R501	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R503	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R504	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R505	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R507	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R509	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R510	NRSA63J-332X	MG RESISTOR	3.3kΩ 1/16W J	
R511	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R512	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R518	NRSA63J-182X	MG RESISTOR	1.8kΩ 1/16W J	
R521	NRSA63J-271X	MG RESISTOR	270Ω 1/16W J	
R526	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R527	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R528	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	
R529	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R533	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	
R534	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	
R535	NRSA63J-152X	MG RESISTOR	1.5kΩ 1/16W J	
R542	NRSA63J-102X	MG RESISTOR	1kΩ 1/16W J	
R545	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R546	NRSA63J-471X	MG RESISTOR	470Ω 1/16W J	
R547	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R548	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R571	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R573	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R574	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R575	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R577	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
R578	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R579	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	
R580	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	
R581	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local
L501	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L502	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
L504	QQL231J-330Y	COIL	4.7Ω 33uH J	
L508	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	
B501	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
BK1	LP40425-001A	BRACKET(PWB)		
CN501	QGF1208F1-04	CONNECTOR	FFC/FPC (1-4)	
CN502	QGG2503K2-20	CONNECTOR	(1-20)	
CN504	QGF1208F1-06	CONNECTOR	FFC/FPC (1-6)	C
W51	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W52	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W53	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W54	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W55	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W56	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	
W57	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	

SECAM board

Block No. [8][8]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA20037-01B	SECAM BOARD ASSY		C
IC301	LA7358	IC		C
IC4301	LA7357M-W	IC		C
IC4304	74HC4538D-X	IC		C
Q301	2SA1037AK/QR/-X	TRANSISTOR		C
Q301	or 2SB709A/QR/-X	TRANSISTOR		C
Q301	or 2SA1530A/QR/-X	TRANSISTOR		C
Q302	DTA144WKA-X	TRANSISTOR		C
Q302	or UN211E-X	DIGI TRANSISTOR		C
Q302	or RT1P44HC-X	DIGI TRANSISTOR		C
Q4301	2SD601A/QRS/-X	TRANSISTOR		C
Q4301	or 2SC2412K/QRS/-X	TRANSISTOR		C
Q4301	or 2SC3928A/QRS/-X	TRANSISTOR		C
Q4302	2SB709A/QR/-X	TRANSISTOR		C
Q4302	or 2SA1037AK/QR/-X	TRANSISTOR		C
Q4302	or 2SA1530A/QR/-X	TRANSISTOR		C
Q4303	2SB709A/QR/-X	TRANSISTOR		C
Q4303	or 2SA1037AK/QR/-X	TRANSISTOR		C
Q4303	or 2SA1530A/QR/-X	TRANSISTOR		C
D4301	1SS133-T2	DIODE		C
C301	NDC31HJ-151X	C CAPACITOR	150pF 50V J	C
C302	QEKJ1HM-225Z	E CAPACITOR	2.2uF 50V M	C
C303	NCB31EK-682X	C CAPACITOR	6800pF 25V K	C
C304	NCB31EK-682X	C CAPACITOR	6800pF 25V K	C
C305	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C307	NDC31HJ-151X	C CAPACITOR	150pF 50V J	C
C308	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C309	NCB31CK-104X	C CAPACITOR	0.1uF 16V K	C
C310	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C311	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C312	NCB31HK-102X	C CAPACITOR	1000pF 50V K	C
C313	QEKJ1HM-474Z	E CAPACITOR	0.47uF 50V M	C
C315	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	C
C316	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C317	NCB31HK-681X	C CAPACITOR	680pF 50V K	C
C318	NCB31EK-223X	C CAPACITOR	0.022uF 25V K	C
C319	QEKJ1HM-105Z	E CAPACITOR	1uF 50V M	C
C320	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C321	NDC31HG-301X	C CAPACITOR	300pF 50V G	C
C322	NCB31AK-474X	C CAPACITOR	0.47uF 10V K	C
C323	QEKJ0JM-476Z	E CAPACITOR	47uF 6.3V M	C
C4301	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4302	QEKJ1CM-476Z	E CAPACITOR	47uF 16V M	C
C4304	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4305	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4306	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C

△ Symbol No.	Part No.	Part Name	Description	Local
C4307	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4308	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4309	NCB31EK-103X	C CAPACITOR	0.01uF 25V K	C
C4310	NDC31HJ-471X	C CAPACITOR	470pF 50V J	C
C4318	NCB31EK-104X	C CAPACITOR	0.1uF 25V K	C
C4319	NDC31HJ-471X	C CAPACITOR	470pF 50V J	C
R301	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	C
R302	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	C
R303	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	C
R304	NRSA63J-682X	MG RESISTOR	6.8kΩ 1/16W J	C
R305	NRSA63J-473X	MG RESISTOR	47kΩ 1/16W J	C
R306	NRSA63J-273X	MG RESISTOR	27kΩ 1/16W J	C
R307	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	C
R308	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	C
R309	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R310	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	C
R311	NRSA63J-472X	MG RESISTOR	4.7kΩ 1/16W J	C
R312	NRSA63J-272X	MG RESISTOR	2.7kΩ 1/16W J	C
R313	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	C
R314	NRSA63D-243X	MG RESISTOR	24kΩ 1/16W D	C
R315	NRSA63J-564X	MG RESISTOR	560kΩ 1/16W J	C
R316	NRSA63J-124X	MG RESISTOR	120kΩ 1/16W J	C
R329	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R4301	NRSA63J-561X	MG RESISTOR	560Ω 1/16W J	C
R4302	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R4304	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	C
R4305	NRSA63J-562X	MG RESISTOR	5.6kΩ 1/16W J	C
R4306	NRSA63J-122X	MG RESISTOR	1.2kΩ 1/16W J	C
R4307	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	C
R4308	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	C
R4309	NRSA63J-222X	MG RESISTOR	2.2kΩ 1/16W J	C
R4310	NRSA63J-822X	MG RESISTOR	8.2kΩ 1/16W J	C
R4311	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	C
R4312	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
R4317	NRSA63J-223X	MG RESISTOR	22kΩ 1/16W J	C
R4318	NRSA63J-103X	MG RESISTOR	10kΩ 1/16W J	C
R4319	NRSA63J-123X	MG RESISTOR	12kΩ 1/16W J	C
R4320	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
L301	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	C
L302	QQL231J-6R8Y	COIL	2.0Ω 6.8uH J	C
L303	QQL231J-270Y	COIL	4.7Ω 27uH J	C
L4301	QQL29BJ-100Z	P COIL	0.40Ω 10uH J	C
CN301	QGF1207C1-15	CONNECTOR	FFC/FPC (1-15)	C
CN4302	QGF1207C1-06	CONNECTOR	FFC/FPC (1-6)	C
W1	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
W2	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
W3	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
W4	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C
W5	NRSA63J-0R0X	MG RESISTOR	0Ω 1/16W J	C

Junction board

Block No. [9][2]

△ Symbol No.	Part No.	Part Name	Description	Local
PW1	LPA10248-01C2	JUNCTION BOARD ASSY		
IC5501	MM1662GH-X	IC		
IC5502	MM1565AF-X	IC		
IC5503	MM1565AF-X	IC		
IC5504	MM1563EF-X	IC		
IC5505	MM1563DF-X	IC		
IC8001	BA15218F-XE	IC		
IC8001	or RC4558D-X	IC		
IC8002	AK5381VTP-X	IC		
IC8002	or AK5357VT-X	IC		
IC8201	BA15218F-XE	IC		
IC8201	or RC4558D-X	IC		
IC8202	AK4381VT-X	IC		
IC8202	or AK4385VT-X	IC		

MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

△ Symbol No.	Part No.	Part Name	Description	Local	△ Symbol No.	Part No.	Part Name	Description	Local
Q5501	2SD1819A/QRS/-X	TRANSISTOR			C8010	QEK1EM-106Z	E CAPACITOR	10uF 25V M	
Q5501	or 2SC4081/QRS/-X	TRANSISTOR			C8011	QEK1HM-475Z	E CAPACITOR	4.7uF 50V M	
Q5501	or 2PC4081/R/-X	TRANSISTOR			C8012	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
Q5502	UN5111-X	DIGI TRANSISTOR			C8013	QEK0JM-107Z	E CAPACITOR	100uF 6.3V M	
Q5502	or DTA114EUA-X	DIGI TRANSISTOR			C8014	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
Q5502	or PDA114EU-X	DIGI TRANSISTOR			C8015	QEK0JM-107Z	E CAPACITOR	100uF 6.3V M	
Q5502	or RN2302-X	DIGI TRANSISTOR			C8016	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
Q5502	or RT1P141M-X	DIGI TRANSISTOR			C8052	QEK1CM-107Z	E CAPACITOR	100uF 16V M	
Q5503	2SD2144S/UV/-T	TRANSISTOR			C8053	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
Q5503	or 2SC3576-JVC-T	TRANSISTOR			C8055	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
Q5504	UN5211-X	DIGI TRANSISTOR			C8057	QEK1CM-107Z	E CAPACITOR	100uF 16V M	
Q5504	or DTC114EUA-X	DIGI TRANSISTOR			C8201	QEK1CM-476Z	E CAPACITOR	47uF 16V M	
Q5504	or PDT114EU-X	DIGI TRANSISTOR			C8202	NCB21HK-471X	C CAPACITOR	470pF 50V K	
Q5504	or RN1302-X	DIGI TRANSISTOR			C8203	NCB21HK-471X	C CAPACITOR	470pF 50V K	
Q5504	or RT1N141M-X	DIGI TRANSISTOR			C8204	NCB21HK-472X	C CAPACITOR	470pF 50V K	
Q5505	UN5111-X	DIGI TRANSISTOR			C8205	NCB21HK-471X	C CAPACITOR	470pF 50V K	
Q5505	or DTA114EUA-X	DIGI TRANSISTOR			C8206	NCB21HK-472X	C CAPACITOR	470pF 50V K	
Q5505	or PDA114EU-X	DIGI TRANSISTOR			C8207	NCB21HK-471X	C CAPACITOR	470pF 50V K	
Q5505	or RN2302-X	DIGI TRANSISTOR			C8208	QEK1CM-476Z	E CAPACITOR	47uF 16V M	
Q5505	or RT1P141M-X	DIGI TRANSISTOR			C8209	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
Q5506	UN5211-X	DIGI TRANSISTOR			C8210	QEK0JM-337Z	E CAPACITOR	330uF 6.3V M	
Q5506	or DTC114EUA-X	DIGI TRANSISTOR			C8211	NCB21HK-104X	C CAPACITOR	0.1uF 50V K	
Q5506	or PDT114EU-X	DIGI TRANSISTOR			R5501	QRE121J-561Y	C RESISTOR	560Ω 1/2W J	
Q5506	or RN1302-X	DIGI TRANSISTOR			R5502	QRE121J-561Y	C RESISTOR	560Ω 1/2W J	
Q5506	or RT1N141M-X	DIGI TRANSISTOR			R5503	NRSA02J-562X	MG RESISTOR	5.6kΩ 1/10W J	
Q7101	2SB1218A/QR/-X	TRANSISTOR			R5504	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
Q7101	or 2SA1576A/QR/-X	TRANSISTOR			R5505	NRSA02J-222X	MG RESISTOR	2.2kΩ 1/10W J	
Q7101	or 2PA1576/R/-X	TRANSISTOR			R7101	NRSA02J-122X	MG RESISTOR	1.2kΩ 1/10W J	
Q8001	2SC4081/QRS/-X	TRANSISTOR			R7102	NRSA02J-102X	MG RESISTOR	1kΩ 1/10W J	
Q8001	or 2PC4081/R/-X	TRANSISTOR			R7147	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
Q8001	or 2SD1819A/QRS/-X	TRANSISTOR			R7148	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
Q8002	2SC4081/QRS/-X	TRANSISTOR			R7149	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
Q8002	or 2PC4081/R/-X	TRANSISTOR			R7150	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
Q8002	or 2SD1819A/QRS/-X	TRANSISTOR			R7151	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
Q8003	DTC144WUA-X	DIGI TRANSISTOR			R7161	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
Q8003	or PDT144WU-X	DIGI TRANSISTOR			R7162	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
Q8003	or UN521E-X	DIGI TRANSISTOR			R8001	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
Q8003	or RN1309-X	DIGI TRANSISTOR			R8002	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
Q8004	DTC144WUA-X	DIGI TRANSISTOR			R8003	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
Q8004	or PDT144WU-X	DIGI TRANSISTOR			R8004	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
Q8004	or UN521E-X	DIGI TRANSISTOR			R8005	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
Q8004	or RN1309-X	DIGI TRANSISTOR			R8006	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
Q8005	DTA144WUA-X	DIGI TRANSISTOR			R8007	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
Q8005	or PDT144WU-X	DIGI TRANSISTOR			R8008	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
Q8005	or UN511E-X	DIGI TRANSISTOR			R8009	NRSA02J-162X	MG RESISTOR	1.6kΩ 1/10W J	
Q8005	or RN2309-X	DIGI TRANSISTOR			R8010	NRSA02J-152X	MG RESISTOR	1.5kΩ 1/10W J	
D5501	1A3G-T2	SI DIODE			R8011	NRSA02J-162X	MG RESISTOR	1.6kΩ 1/10W J	
D5501	or 10EDB20-T2	SI DIODE			R8012	NRSA02J-152X	MG RESISTOR	1.5kΩ 1/10W J	
D5501	or ERA15-02-T2	SI DIODE			R8013	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
D5502	1SS133-T2	DIODE			R8014	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
D5502	or 1SS270A-T2	SI DIODE			R8015	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
D5503	MTZJ27C-T2	Z DIODE			R8016	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
D5503	or RD27ES/B3/-T2	Z DIODE			R8017	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
C5501	NCB21AK-105X	C CAPACITOR	1uF 10V K		R8018	NRSA02J-123X	MG RESISTOR	12kΩ 1/10W J	
C5502	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M		R8019	NRSA02J-223X	MG RESISTOR	22kΩ 1/10W J	
C5503	NCB21HK-471X	C CAPACITOR	470pF 50V K		R8051	NRSA02J-221X	MG RESISTOR	220Ω 1/10W J	
C5504	NCB21AK-105X	C CAPACITOR	1uF 10V K		R8052	NRSA02J-0R0X	MG RESISTOR	0Ω 1/10W J	
C5505	QETN1AM-107Z	E CAPACITOR	100uF 10V M		R8201	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
C5506	NCB21HK-471X	C CAPACITOR	470pF 50V K		R8202	NRSA02J-273X	MG RESISTOR	27kΩ 1/10W J	
C5507	NCB21AK-105X	C CAPACITOR	1uF 10V K		R8203	NRSA02J-512X	MG RESISTOR	5.1kΩ 1/10W J	
C5508	QETN1AM-107Z	E CAPACITOR	100uF 10V M		R8204	NRSA02J-121X	MG RESISTOR	120Ω 1/10W J	
C5509	NCB21HK-471X	C CAPACITOR	470pF 50V K		R8205	NRSA02J-121X	MG RESISTOR	120Ω 1/10W J	
C5510	NCB21AK-105X	C CAPACITOR	1uF 10V K		R8206	NRSA02J-512X	MG RESISTOR	5.1kΩ 1/10W J	
C5511	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M		R8207	NRSA02J-512X	MG RESISTOR	5.1kΩ 1/10W J	
C5512	NCB21HK-471X	C CAPACITOR	470pF 50V K		R8208	NRSA02J-121X	MG RESISTOR	120Ω 1/10W J	
C5513	NCB21AK-105X	C CAPACITOR	1uF 10V K		R8209	NRSA02J-121X	MG RESISTOR	120Ω 1/10W J	
C5514	QETN0JM-107Z	E CAPACITOR	100uF 6.3V M		R8210	NRSA02J-512X	MG RESISTOR	5.1kΩ 1/10W J	
C5515	NCB21HK-471X	C CAPACITOR	470pF 50V K		R8211	NRSA02J-273X	MG RESISTOR	27kΩ 1/10W J	
C7123	NDC21HJ-120X	C CAPACITOR	12pF 50V J		R8212	NRSA02J-471X	MG RESISTOR	470Ω 1/10W J	
C7124	NDC21HJ-6R0X	C CAPACITOR	6pF 50V J		R8213	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
C8001	NDC21HJ-101X	C CAPACITOR	100pF 50V J		R8214	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
C8003	NDC21HJ-101X	C CAPACITOR	100pF 50V J		R8215	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
C8005	NDC21HJ-101X	C CAPACITOR	100pF 50V J		R8216	NRSA02J-470X	MG RESISTOR	47Ω 1/10W J	
C8007	NDC21HJ-101X	C CAPACITOR	100pF 50V J		R8217	NRSA02J-103X	MG RESISTOR	10kΩ 1/10W J	
C8009	QEK1EM-106Z	E CAPACITOR	10uF 25V M		R8219	NRSA02J-432X	MG RESISTOR	4.3kΩ 1/10W J	
					R8220	NRSA02J-432X	MG RESISTOR	4.3kΩ 1/10W J	
					R8221	NRSA02J-432X	MG RESISTOR	4.3kΩ 1/10W J	

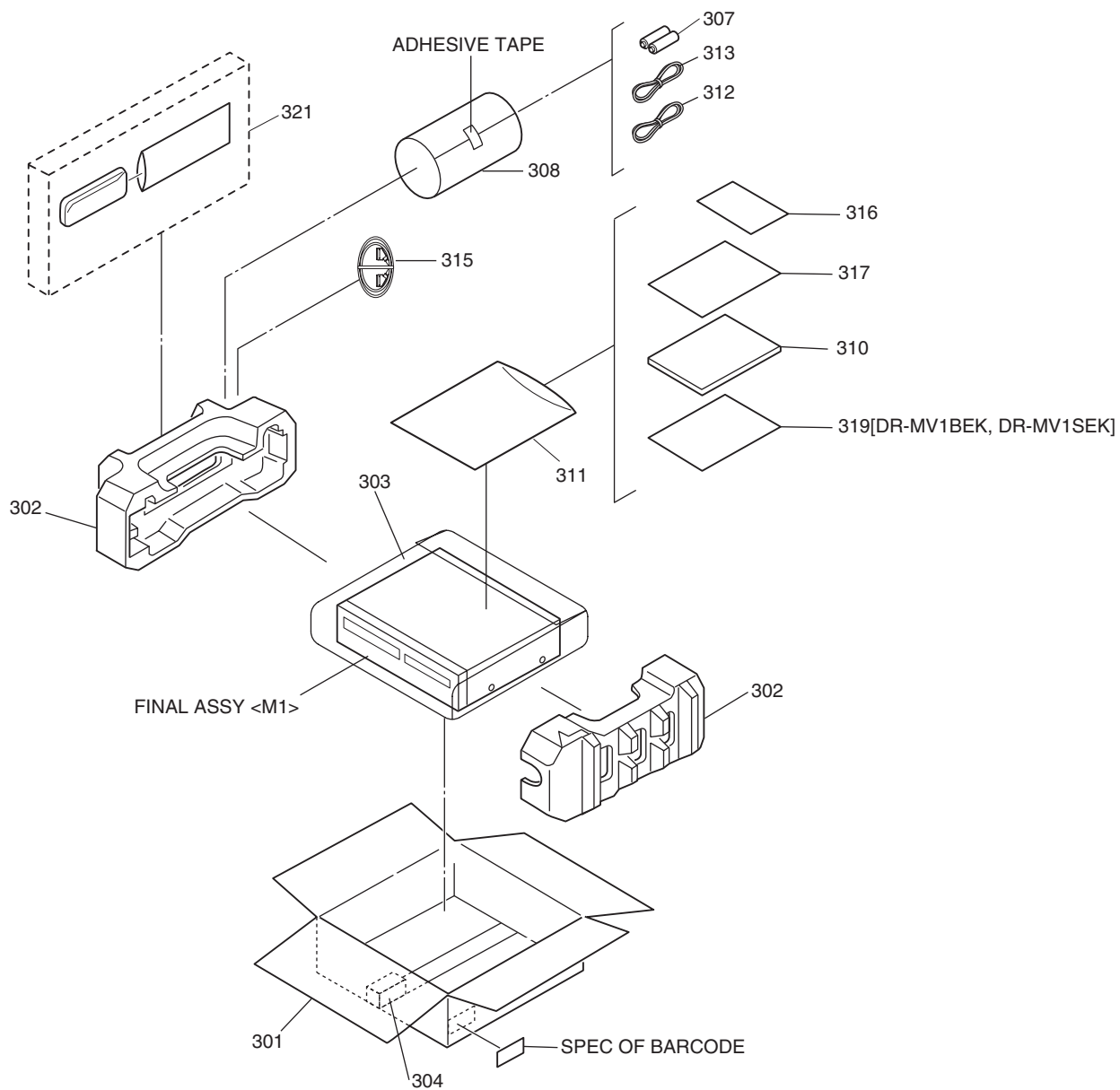
MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

Symbol No.	Part No.	Part Name	Description	Local
R8222	NRSA02J-432X	MG RESISTOR	4.3k Ω 1/10W J	
R8231	NRSA02J-222X	MG RESISTOR	2.2k Ω 1/10W J	
R8232	NRSA02J-222X	MG RESISTOR	2.2k Ω 1/10W J	
R8233	NRSA02J-102X	MG RESISTOR	1k Ω 1/10W J	
L7101	QQL29BJ-100Z	P COIL	0.40 Ω 10uH J	
L7102	QQL071J-6R8Y	COIL	1.20 Ω 6.8uH J	
L8001	QQL29BJ-220Z	P COIL	0.65 Ω 22uH J	
L8002	QQL29BJ-220Z	P COIL	0.65 Ω 22uH J	
B7101	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
B7107	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
B7112	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
B7118	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
CN5501	QGB1231M1-15	CONNECTOR	B-B (1-15)	
CN7102	QGB1231M1-15	CONNECTOR	B-B (1-15)	
CN7103	QGF1207C1-04	CONNECTOR	FFC/FPC (1-4)	
CN7104	QGF1207C1-04	CONNECTOR	FFC/FPC (1-4)	
CN7105	QGF1207C1-04	CONNECTOR	FFC/FPC (1-4)	
CN7106	QGF1016C3-04	CONNECTOR	FFC/FPC (1-4)	
CN7107	QGF1207C1-09	CONNECTOR	FFC/FPC (1-9)	
CN7108	QGB2027M6-28S	CONNECTOR	B-B (1-28)	
CN7109	QGB2027M6-28S	CONNECTOR	B-B (1-28)	
CN8001	QGB1231M1-11	CONNECTOR	B-B (1-11)	
K7101	NRSA63J-0R0X	MG RESISTOR	0 Ω 1/16W J	
K8001	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
K8002	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
K8201	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
K8202	NRSA02J-4R7X	MG RESISTOR	4.7 Ω 1/10W J	
W1	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
W2	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
W5	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
W6	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
W9	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
W10	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
W11	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
W12	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
W13	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	
W14	NRSA02J-0R0X	MG RESISTOR	0 Ω 1/10W J	

Packing materials and accessories parts list

The instruction manual to be provided with this product will differ according to the destination.

Block No.M3MM



MODEL	MARK	MODEL	MARK
DR-MV1BEK	A	DR-MV1SEK	D
DR-MV1BEU	B	DR-MV1SEU	E
DR-MV1SEF	C		

Packing and accessories

Block No. [M][3][M][M]

△ Symbol No.	Part No.	Part Name	Description	Local
301	LP31338-016A	PACKING CASE		A,B
301	LP31338-013A	PACKING CASE		C,D,E
302	LP31340-001A	CUSHION ASSY		
303	PQM30021-105	POLY BAG		
304	LP31258-001A	MINI CUSHION		
307	-----	BATTERY	R6 TYPE(x2)	
308	QPC02202230P	POLY BAG	22cm x 22cm	
△ 310	LPT0939-001A	INST.BOOK	(FRENCH)	C
△ 310	LPT0938-001A	INST.BOOK	(ENGLISH)	A,D
△ 310	LPT0937-001A	INST.BOOK	(ENGLISH)	B,E
△ 310	LPT0937-002A	INST.BOOK	(GERMANY)	B,E
△ 310	LPT0937-003A	INST.BOOK	(FRENCH)	B,E
△ 310	LPT0937-004A	INST.BOOK	(DUCH)	B,E
△ 310	LPT0937-005A	INST.BOOK	(SPANISH)	B,E
△ 310	LPT0937-006A	INST.BOOK	(ITALIAN)	B,E
△ 310	LPT0937-007A	INST.BOOK	(DANISH)	B,E
△ 310	LPT0937-008A	INST.BOOK	(SWEDISH)	B,E
△ 310	LPT0937-009A	INST.BOOK	(FINNISH)	B,E
△ 310	LPT0937-010A	INST.BOOK	(NORWEGIAN)	B,E
△ 310	LPT0937-011A	INST.BOOK	(PORTUGUESE)	B,E
△ 310	LPT0937-012A	INST.BOOK	(CZECH)	B,E
△ 310	LPT0937-013A	INST.BOOK	(POLISH)	B,E
△ 310	LPT0937-014A	INST.BOOK	(HUNGARIAN)	B,E
311	QPC02503530P	POLY BAG	25cm x 35cm	
312	QAM0002-001	RF CABLE		
313	QAL0517-005	LED CABLE ASSY		
315	QAM0502-002	PERI CABLE		
316	BT-54013-7	WARRANTY CARD		B,E
317	BT-54008-6	GUARANTY CARD		A,C,D
319	LYT0194-001B	Q.CARD		A,D
321	RM-SDR006E	REMOCON		